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ANNUAL
CATALOG

1913

"Diamond
Quality"

TRUE TO NAME

SEEDS

WHITE
ICICLE

HOME GARDEN
SPECIAL
5 PKTS. FOR 25c
POST-PAID

CRISPETTE
LETTUCE

DETROIT BEET

LEMON
CUCUMBER

COPENHAGEN MARKET

PORTLAND
SEED
COMPANY
Diamond Quality
FRONT AND YAMHILL STS.
PORTLAND, ORE.

Our New Brick and Concrete Warehouse

East First and Alder Sts.

THIS substantial and commodious building was constructed by us especially for the storage and handling of our "Diamond Quality" recleaned seeds and other stocks that are ready for distribution to our customers.

Warehouse "D" adjoining, covering an equal area, will be used exclusively for manufacturing our Poultry Foods, Fertilizers, etc., and for the re-cleaning of seeds.

These two warehouses, covering an area of 100 by 200 feet, together with our business offices and sales-rooms, 180 to 186 Front Street, and our large dock at foot of Yamhill St., give us

*A Combined Floor Space
of Over Three Acres.*



HAVING OUR OWN GROUNDS AND BUILDINGS in the geographical business center of Portland; with the Southern Pacific tracks at one door, the O.W.R. and N. at the other, and our house tracks easily accessible to any of the great trans-continental lines, places us in the most advantageous position to give prompt, efficient and economical service.

Our Trademark
Insures quality
satisfaction
and FULL
VALUE



PARCEL POST RATES

are based on districts and ZONES. The District includes the office where mailed and rural routes therefrom and a rate of 5c, for the first pound and 1c. for each additional pound is charged between points in this District. ZONE rates increase with the distance. See Table.

When You Order from Portland look for the Zone that corresponds to the distance you are away. Then note where the weight of your package is marked on the table of rates, on the same line under your ZONE will be shown the amount of postage to be added when ordering. We have given the weight of most items mailable by parcel post, and by the aid of the table here shown you can always figure your postage.

Postage Rates on Seeds, Scions, Bulbs, Roots, Cuttings and Plants remain as heretofore, eight cents per pound, but package may be increased to the weight and size allowed by parcel post and parcel post stamps must be used. Books also 8c per lb. as before.

A Parcel Post package may weigh from four ounces to eleven pounds and must not exceed in size 72 inches in length and girth combined. Four ounces or less will be charged for, at one cent per ounce or fraction thereof.

WEIGHT	1st Zone		2nd Zone	3rd Zone	4th Zone	5th Zone	6th Zone	7th Zone	8th Zone	
	Local rate	Zone rate	50 miles	150 miles	300 miles	600 miles	1000 miles	1400 miles	1800 miles	all over 1800 miles
1 pound	\$0.05	\$0.05	\$0.06	\$0.07	\$0.08	\$0.09	\$0.10	\$0.11	\$0.12	
2 pounds	.06	.08	.10	.12	.14	.16	.19	.21	.24	
3 pounds	.07	.11	.14	.17	.20	.23	.28	.31	.36	
4 pounds	.08	.14	.18	.22	.26	.30	.37	.41	.48	
5 pounds	.09	.17	.22	.27	.32	.37	.46	.51	.60	
6 pounds	.10	.20	.26	.32	.38	.44	.55	.61	.72	
7 pounds	.11	.23	.30	.37	.44	.51	.64	.71	.84	
8 pounds	.12	.26	.34	.42	.50	.58	.73	.81	.96	
9 pounds	.13	.29	.38	.47	.56	.65	.82	.91	.108	
10 pounds	.14	.32	.42	.52	.62	.72	.91	.101	.120	
11 pounds	.15	.35	.46	.57	.68	.79	1.00	1.11	1.32	

Postage to Canada on 4th class pkgs. of over 4 oz. and not exceeding 4 lbs. 6 oz. go at the 8th zone rate. The 8th zone rate applies to Alaska, Mexico, Cuba, Hawaii, Panama and the Philippines and allows full weight 11 lbs.

Portland Seed Company's

COMPLETE SEED ANNUAL

For 1913



DIAMOND QUALITY SEEDS are grown from select strains by the most careful and trustworthy specialists in various sections of the world, many varieties being grown on the Coast under our direct supervision. They are carefully cleaned and graded, then finally tested for germination and purity.

MANY YEARS OF EXPERIENCE and a thorough knowledge of our business is necessary to establish trade connections with the best growers and producers, but only in this way is it possible to offer the finest true stocks at no greater cost to our customers than is asked for ordinary kinds. That "Diamond Quality" and service is appreciated has been demonstrated by the necessity for again increasing our floor space and facilities by the erection of a substantial six-story concrete and brick warehouse, equipped with everything necessary for the handling of seeds and the manufacture of our fertilizers, foods and preparations.

OUR SEED LABORATORY is complete in every appointment as approved by the Department of Agriculture and we are the only Seed Company maintaining a Laboratory in the state of Oregon.

OUR 1913 CATALOG is offered with the full confidence that you will find it a dependable guide and ready reference in choosing profitable varieties and suitable equipment for economical production. Your inquiries or orders will have immediate and courteous attention and we trust to again serve our old friends and many new ones.

Portland Seed Company

WHEN AND HOW TO ORDER

SEND in your combined orders for seeds, plants, supplies, etc., at once. We are prepared to fill orders as soon as this Catalog reaches you, and if you do not want all sent now we will send part now and the balance later. The advantage of this is that your order is entered and filed or stock reserved so the complete order or any part can be sent upon notice without delay. If you want part or all of your order held, state it distinctly with date when shipment is to be made. All orders for potatoes, plants, and other perishable goods are carefully booked on receipt, and filled in rotation as soon as weather permits. If shipped early, they are at buyer's risk.

BE SURE TO SIGN YOUR NAME, giving Postoffice and State. **DO NOT WRITE LETTERS ON THE SAME SHEET AS ORDERS.**

USE ORDER BLANK in the front of your Catalog, carefully filling out the blank spaces at the top for shipping directions.

SEEDS POSTPAID BY MAIL. We send all vegetable and flower seeds in quantities of one pound or less by mail, postpaid, to any Postoffice in the United States, at the prices named in this Catalog, unless otherwise stated.

BY FREIGHT OR EXPRESS. In ordering vegetable or flower seeds to be sent by freight or express at your expense, deduct 10c per pound from single pound postpaid prices.

PREPAY STATIONS. When you send in orders to go by freight or express, be sure that you add money enough to pay freight charges if your station is a prepay point, which is always the case where there is no regular agent.

LARGE ORDERS. Any dealer, market gardener, institution or individual wishing seed in large quantities, is requested to mail us a list of what is wanted, and we will promptly return it with the very lowest market prices. **A letter of inquiry may save you dollars** if you want to buy in quantity.

COMPLAINTS OR PRAISES. If you are well pleased with our goods and the manner of doing business, tell everyone. If you are not, tell us, so we can please you. Our best efforts will be put forth in filling all orders carefully and promptly in a way that will please you.

USE MONEY-ORDERS, POST OFFICE or EXPRESS, BANK DRAFTS OR REGISTERED LETTERS. DO NOT send personal checks as your order may be delayed for their collection or identification. Stamps will be accepted on small orders.

Be sure to order early — before stocks are depleted.

NOTE.—We use every precaution in procuring fresh, pure and reliable seeds, etc., but we, in common with other responsible seed houses, sell our goods subject to the following disclaimer, it being that adopted by the American Seed Trade Association, i. e.:—We give no warranty, express or implied, as to description, quality, productiveness or any other matter of any seeds, bulbs or plants sent out, and will not be in any way responsible for the crop. If the purchaser does not accept the goods on these terms they are to be returned at once.—Portland Seed Co.

"DIAMOND QUALITY" VEGETABLE SEEDS

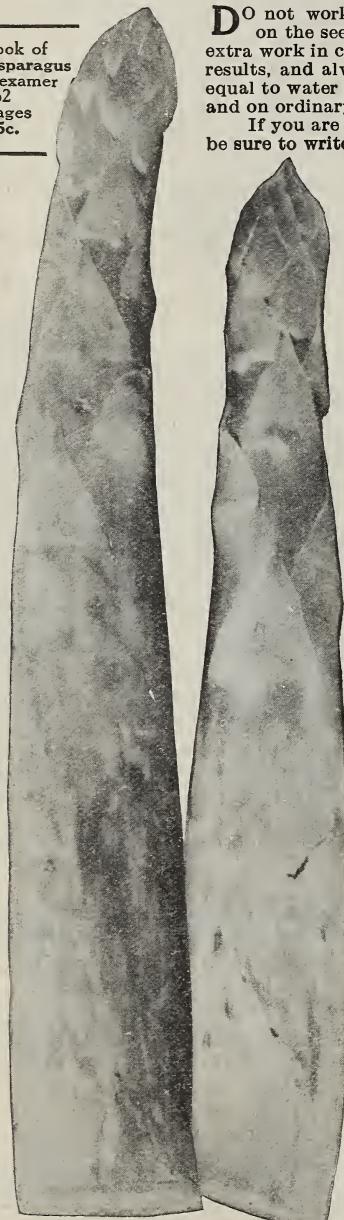
Grown especially for us from our own selected strains. Carefully re-cleaned and tested for germination.

WE have marked those varieties that mature early with this little Diamond,  our trade mark. This will aid you in the selections for your home garden.

If you live in Northwestern Oregon or Washington you will have better success with your garden by planting these early maturing varieties after the spring weather is settled and the ground warm, than if you planted very early, as many seeds will not give the best results in the cold damp of the early spring, and even if they live, the plant may be stunted and not grow well. These suggestions are only general, as you will note that many special sorts can be planted very early.

If you live in the Willamette Valley or Southern Oregon you can plant almost anything as early as the condition of the soil will permit.

Book of
Asparagus
Hexamer
162
Pages
55c.



Argenteuil

DO not work the soil when it is wet, and if you will press the dirt firmly down on the seeds, they will germinate quickly even in comparatively dry soil. Any extra work in carefully preparing the soil will more than repay you in the increased results, and always remember that constant and thorough cultivation is almost equal to water and fertilizer both, and will insure a good crop even in a dry season, and on ordinary soil.

If you are in doubt about what you should do, or want any special information, be sure to write to us. We will be pleased to give your inquiries our careful attention, and will advise you to the full extent of our knowledge.

ASPARAGUS

Asparagus is one of the earliest spring vegetables, and would be in universal use were it not for the mistaken idea that it is difficult to grow. In reality it can be produced very easily and cheaply. A bed 15x50 feet, requiring about 100 plants, should give an abundant supply for the ordinary family.

CULTURE—Soak the seeds 24 hours in warm water, and sow early in drills one foot apart. An ounce of seed will sow about 300 feet of drill. Keep the soil mellow and free from weeds. After one year's growth, transplant into permanent beds. A warm sandy soil is the best, and one which has for some years been cultivated in garden crops and heavily manured is greatly preferred to a fresh soil. But at no period of its growth should the asparagus crop be allowed to lack for manuring. From one to three years' time can be saved by buying roots of us. See plant department. 7260 roots will plant an acre.



Argenteuil.

A popular French asparagus of great merit; larger and superior to Palmetto; of vigorous, even growth; very early and free from disease.

Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 35c; 1 lb., \$1.00.

Connover's Colossal.

A large and rapid grower of excellent quality. Makes large uniform heads of finest quality. This is the famous "Bouldin Island" Asparagus, the best canning variety.

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 20c; 1 lb., 65c

Columbian Mammoth White.

A newer, distinct and valuable variety. The stalks are white, of the largest size; very productive and early.

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 20c; 1 lb., 65c.



Palmetto.

The favorite green asparagus. Extra early and the uniformly large stalks remain tender longer than any other variety. Palmetto is disease resistant, and a heavy sure cropper.

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 20c; 1 lb., 65c.

Artichoke

Large Green Globe.

The variety used as a table vegetable. The edible portion is the thick end of leaf of the flower head. Sow early in drills and when about ten inches high transplant into rows four feet apart each way. It will produce only a small crop the first year, but will continue in good bearing five years. Cut before the bud opens.

Pkt., 5c; oz., 35c.

Jerusalem.—White.

Distinct from the globe; produces tubers like potato; grown in the same way. A fine vegetable for table and also valuable as hog feed. Price and description under Field Seeds.

Nicely's BEANS

Our general selection of varieties includes those best adapted to western conditions and will give best results in their respective classes.

CULTURE—The soil best adapted for growing beans is a light, rich, well-drained loam, which was well manured for the previous crop. If the ground is too freshly manured, the plants are apt to run to vines and set few blossoms. Plant in drills about two inches deep and from eighteen inches to two feet apart, as soon as the ground is dry enough. **Beans are very sensitive to cold and wet before they have sprouted, but are not so liable to be damaged after they are above ground.**

When ordering Beans by mail, add 10c per pound for postage.

Wax or Yellow Podded Kinds

DWARF OR BUSH VARIETIES

Pencil Pod Black Wax

"Pencil Pod" is the best Black Wax Bean ever offered.

Of dwarf, bushy growth, about fifteen inches high, large luxuriant foliage, beneath which in great clusters will be found an enormous crop of beautiful straight yellow pods six to seven inches long, well rounded, deeply "saddle backed," meaty and solid clear through: they are brittle, of rich mild flavor, and entirely stringless. An early, sure cropper; of the finest quality.

Pkt., 10c; Ib., 20c; 10 lbs., \$1.75

New Rustless Golden Wax

A splendid improvement over the popular Golden Wax. Beans are very uniform, of a bright golden yellow, about four inches long, rather flat. The meaty pods are crisp, tender and entirely stringless. Bush grows stiffly erect and bears enormously. Pkt., 10c; Ib., 20c; 10 lbs., \$1.50.

Violet Flageolet or Perfection Wax.

One of the earliest wax varieties, and continues in bearing until late fall. It is of sturdy habit, bearing its fine, large stringless pods in great profusion well up from the ground.

Pkt., 10c; Ib., 25c; 10 lbs., \$1.75

Davis Wax.

Rustless and immensely productive, very hardy and one of the best for market gardeners. The dried bean is kidney-shaped, clear white, and a favorite for baking and canning.

Pkt., 10c; Ib., 20c; 10 lbs., \$1.50

Wardwell's Kidney Wax.

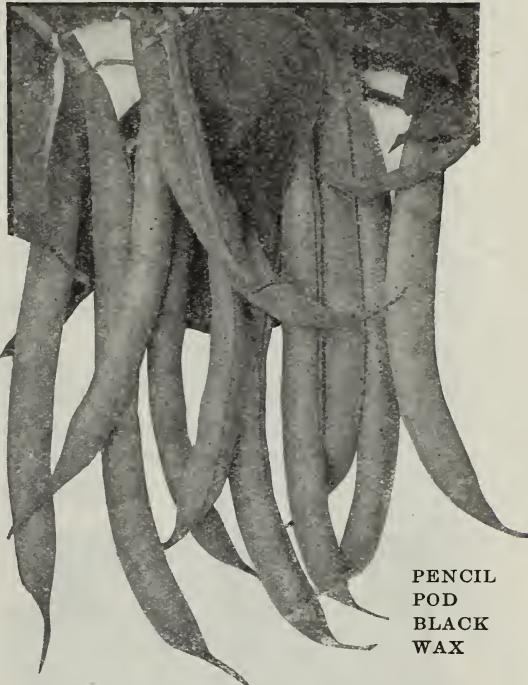
Vines are of medium size, with long, flat pods of a delicate waxy yellow, very brittle and entirely stringless. We specially recommend this bean.

Pkt., 10c; Ib., 15c; 10 lbs., \$1.25

Golden Wax.

Very hardy and productive. Our stock of this popular standard variety is extra choice.

Pkt., 10c; Ib., 15c; 10 lbs., \$1.25



PENCIL
POD
BLACK
WAX

Improved Prolific Black Wax.

Market gardeners and others to whom earliness is a matter of prime importance cannot afford to be without this, which is truly the "earliest of all" wax beans. Pkt., 10c; Ib., 20c; 10 lbs., \$1.50

OREGON POLE LIMA

Orcas, Wn., Jan. 29, 1912.

Gentlemen: I tried for six years to raise Lima Beans here, using Burpee's Bush as the hardiest, but never scored a success until last Summer, 1911, when your Oregon Pole Lima did well on the north side of Shaw Island, San Juan Co., Puget Sound.

Stanwood, Wn., Feb. 12, 1912.

Gentlemen: The packet of Lima Beans you sent me last year did wonderfully. The vines were ten feet high, planted the first week in April and with such unfavorable weather I had given up ever seeing a bean up, but they came all right and were literally loaded with enormous pods.

MARKET GARDENERS—The Asparagus Bean is a smoother handsomer better quality bean than Kentucky Wonder therefore a more profitable better seller,—See page 5.

BEANS—Continued**Dwarf or Bush—Green Podded Kind**

When ordering beans by mail, add 10c. per pound for postage.

**New Stringless.**

The finely shaped, long green pods are absolutely stringless, and are ready to market two weeks earlier than any other green-podded bean. It is of immense value, not only to the market gardener, but also for those who seek early beans of a rare quality for the home table.

Pkt., 10c; lb., 15c; 10 lbs., \$1.25.

Extra Early Red Valentine.

This improved strain has a healthy, vigorous growth. The Beans are small, but the pods are thick, round and fleshy; very tender, rich, and quite stringless. A popular bean for canning green.

Bush grows to a height of fifteen inches and is very prolific. **Pkt., 10c; lb., 15c; 10 lbs., \$1.25.**

Refugee, or Thousand To One.

Of great value on account of its hardiness, vigorous growth and wonderful productiveness. Is not excelled by any other variety as a snap bean, and is considered the best for pickling or canning. Beans small, dark purple, veined brown. Pods of perfect form, dark green, veined purple

Pkt., 10c; lb., 20c; 10 lbs., \$1.75.

White Navy.

Grown extensively for marketing dry shelled. The best known small white bean. Dwarf in growth and very productive.

Pkt., 10c; lb., 15c; 10 lbs., 85c.

Lima Beans**Oregon Pole Lima****Half Dwarf**

The only Lima Bean to thrive in our cool climate

Oregon Pole Lima grows to an average of about five feet, is a strong, thrifty vine and very prolific, bearing continuously until frost, the blossoms bursting from the top shoots in long panicles, while the pods can be seen in every stage of development, to the matured beans at the bottom of the vine. Pods are well filled, having three to five large beans of the finest quality. Gather any time after full maturity.

Oregon Pole Lima can be planted in any garden soil as early as April or late as July. Give the same care and culture as other Beans, and are ready to use when the pods are filled and first begin to ripen. It is not necessary that they should dry on the vines, except for seed. They are at their best when the full green pods begin to turn yellow.

Try "Oregon Pole Lima." It is a wonder, sure to grow, and will produce more fine beans of delicious table quality than any variety we know of.

Price per pkt., 15c; $\frac{1}{4}$ lb., 25c; 1 lb. 60c, postpaid.

Burpee's Bush Lima.

Beans as large and as fine in quality as the pole varieties. It is also a heavy yielder

Pkt., 10c; lb., 20c; 10 lbs., \$1.50.

Large White Pole Lima.

Vine tall growing; pods long, broad, very thin, dark green; beans large, kidney shaped, greenish-white, flat. **Pkt., 10c; lb., 15c; 10 lbs., \$1.25.**

Canadian Wonder.

This splendid bush bean is the largest, most prolific of the green-podded sorts, and is entirely stringless in its early developments. Comes a little later than the New Stringless Green Pod, but continues in bearing throughout the season, and is excellent shelled green.

Pkt., 10c; lb., 15c; 10 lbs. \$1.25.

Dwarf Horticultural, or "Cranberry Bean"

Grows erect, strong and shrubby. The bean is highly prized, green shelled. It is rather large, plump, and beautifully mottled yellow and red.

Pkt., 10c; lb., 20c; 10 lbs., \$1.50.

Lady Washington.

Sturdy, bushy plant, erect habit. The bean is large, broad and is a great improvement over the old "Navy," being much earlier, a little larger, and a very heavy yielder, being especially adapted to our western soils, and is entirely free from disease. Bush attains a height of about fourteen inches, and beans mature in September

Pkt., 10c; lb., 15c; 10 lbs., 85c.

Broad Windsor.

Stock erect, strong and shrubby. The bean is large, broad and flat; it is the best green shelled.

Pkt., 10c; lb., 15c; 10 lbs., \$1.25.

Castor Bean.

Used for medicinal purposes and by some claimed to keep moles away.

Pkt., 10c; lb., 25c.

GARDENERS,—please write for prices on large orders.

Climbing or Pole Beans

 If ordering by mail, add 10c. per pound for postage.

Asparagus.

The True Asparagus Bean is superior to Kentucky Wonder in quality and fully equal in productiveness. The long slender pods are very fleshy almost round, crisp, tender and delicious, of a beautiful pale green color attractive form and absolutely stringless. No bean equals them either for market or home use. They grow vigorously and bear heavily the vines being literally covered with great clusters of shapely pods. Asparagus beans are profitable and heavy producers for market or garden but owing to their fleshy pods are a difficult seed crop to produce and the demand has always exceeded the supply.

Pkt., 10c; lb., 30c; 10 lbs., \$2.50.

ASPARAGUS BEAN



Kentucky Wonder.

A vigorous climber; very prolific; bearing in clusters; extremely long and very fleshy, succulent pods, flat, thick and remarkably tender. A first-class pole variety.

Pkt., 10c; lb., 15c; 10 lbs., \$1.15.

Indian Chief, or Tall Black Wax.

Remarkable for its fine, tender and succulent pods, which are produced in great abundance.

Pkt., 10c; lb., 15c; 10 lbs., \$1.25.

Dutch Case Knife.

Good corn hill bean; very early; pods long and flat; beans, white; used green or dry.

Pkt., 10c; lb., 15c; 10 lbs., \$1.25.

White Crease Back.

A good, early, green-podded pole bean. Pods are light green 6 inches long and round with a decided crease in the back, are entirely stringless and of excellent quality.

Pkt., 10c; lb., 15c; 10 lbs., \$1.25.

Lazy Wife.

Pods are from four to five inches in length, produced in large clusters in great abundance. Dark green, thick, fleshy and stringless; of unusually rich flavor. Dry beans, pure white; excellent for winter use.

Pkt., 10c; lb., 20c; 10 lbs., \$1.50.

London Horticultural.

The "Cranberry Pole Bean

Very desirable for the family garden. Vines vigorous; pods green, streaked with red. Bean large, oval, cream colored, beautifully splashed with red. Has no superior, green shelled or dry.

Pkt., 10c; lb., 15c; 10 lbs., \$1.25.

Scarlet Runner.

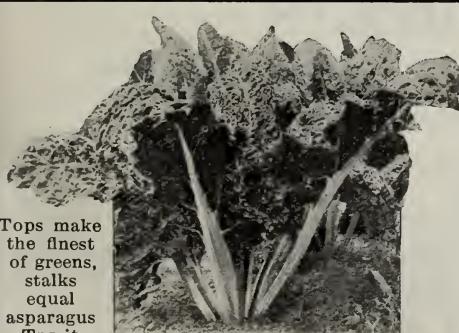
A favorite as a shell bean and for its flowers, which are bright scarlet; seeds broad and kidney shaped.

Pkt., 10c; lb., 25c; 10 lbs., \$2.00.

"EVERYTHING JUST PERFECT"

Little Falls, Wn., Apr. 19, 1912

Gentlemen: The Late Flat Dutch Cabbage I got last year were the finest I ever saw, in fact I have been buying my seeds of you for the past three years and everything was just perfect. The Emerald Isle Kale is just superb.



Tops make the finest of greens, stalks equal asparagus Try it

New Spinach Beet "Lucullus"

All of our Beans and Peas are "hand picked."

BEETS

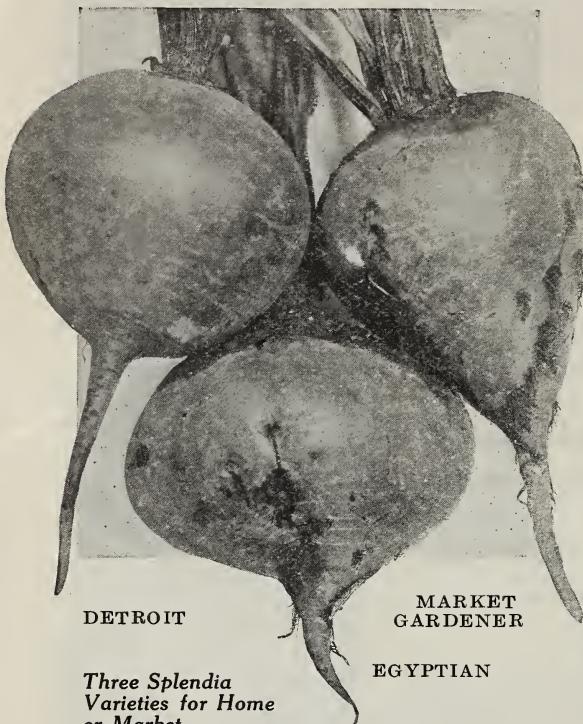
Swiss Chard. (Sea Kale)

New Savoyed Leaf "LUCULLUS." A wonderful new sort of "Spinach-Beet" growing about two and a half feet high. The heavy stalks are over an inch thick and bare for more than a foot of their length. Should be served as you would asparagus and are a great delicacy. The leaves make the finest of "greens." Swiss chard is hardy, easily grown, and should be in every garden. It is one of the most delicious of all vegetables.

Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 40c.

BEETS

CULTURE—The Beet is hardy and may be planted as soon as the ground can be well prepared, doing best in rich, sandy soil, sown in rows sixteen inches apart, covered one and one-half inches deep. The seed will sprout better if soaked twenty-four hours in warm water before planting. Thin out by using the largest ones when they are of sufficient size, continuing until they are six or eight inches apart in the rows. For field crop, the rows should be far enough apart to permit the use of a horse cultivator.



DETROIT

MARKET
GARDENER

EGYPTIAN

Three Splendia
Varieties for Home
or Market.

Half Long Blood.

A new variety of excellent quality. One of the very best for winter use; does not become woody and keeps as well as the Long Dark Blood. The root is smooth and handsome, and the flesh is brilliant in color and good in quality as the best Blood Turnip varieties. Give it a trial.

Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 35c; lb., \$1.00.

SUGAR BEETS

French White Sugar.

The sort most generally grown as it combines, with heavy yield, a good percentage of sugar. It has produced 30 tons of beets to the acre, and contains from 10 to 13 per cent of sugar. The largest yields known have been obtained from this variety

Pkt., 5c; oz., 10c; lb., 45c.

Klein Wanzleben.

This is the variety which is considered best in Germany for producing sugar, and is now taking the lead in this country for this purpose. Our stock of seed is imported direct from one of the most careful German growers, and will give the best results.

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 15c; lb., 45c.

BEETS

Early Eclipse.

One of the best early sorts. It possesses all the qualities requisite in a first-class beet, and is of a uniform, globular shape. The roots are a bright glossy red, fine-grained and delicious.

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 35c; lb., \$1.00.

◆ P. S. Co.'s Market Gardener.

This new, extra early Beet is remarkable for its fine quality and rapid growth; it is of deep red color and handsome shape; as an early market sort it is unrivaled. It is to a large extent superseding the Egyptian, being earlier in development, more attractive in appearance and of superior quality for the table. Market gardeners prefer it.

Pkt., 5c; oz., 20c; $\frac{1}{4}$ lb., 50c; lb., \$1.50.

Detroit Dark Red Turnip.

A fine Beet for bunching for market; tops exceptionally small and uniformly upright. The roots are perfect turnip shape, with small tap roots. One of the deepest red beets. Quality is of the finest; Sweet and tender; best beet for home garden.

Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 40c; lb., \$1.00.

◆ Extra Early Egyptian

The best variety for forcing, and for market gardeners, being very early with small tops. Roots very dark red, rounded on top, but flat beneath, with very small tap roots.

Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 45c; lb., \$1.50.

Early Blood Improved Turnip.

An extra selected stock of blood turnip having larger, coarser tops and roots than the Detroit Dark Red, and requiring a longer time to mature. Excellent for summer and autumn use.

Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 40c; lb., \$1.00.

Long Smooth Dark Blood.

The leading late variety, keeping well all winter. Should be planted in rich, warm soil to secure rapid growth, which makes them tender. Top small, root long and smooth. Flesh deep purple, fine and sweet.

Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 35c; lb., \$1.00.

Lane's Imperial Sugar.

This is an excellent variety and one of the best for stock feeding.

Pkt., 5c; oz., 10c; lb., 45c;

"TRUE BLUE"

Germantown, Calif., Feb. 12, 1912.

Dear Sirs: Accept my sincere thanks for the grass seed which I received in O. K. condition. You're a true blue firm and whenever I or anyone I know need anything in your line I'll remember you.

Thanking you for sending the seed promptly, I remain Yours truly,

BEETS

MANGEL WURZEL



YELLOW GIANT "SLUDSTRUP"

GOLDEN TANKARD "ECKENDORF"

These are grown extensively for stock feeding, and afford large quantities of fresh, nutritious and wholesome food during the winter months, in connection with grain and dried forage. Sugar beets are richer and sweeter than Mangels, but the latter will generally produce one-third to one-half heavier crops per acre, and hence are preferred by many farmers.

Danish Sludstrup

This new Mangel comes highly recommended. Our seed is direct from the originator. We give his descriptions as follows: Long, reddish-yellow, grows well above the ground, and is easy to pull. Has repeatedly been awarded a first class certificate by the Danish Government and is doubtless the best Mangel in the world.

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 20c; lb., 60c.
Not postpaid, 5 lbs., \$2.50; 10 lbs., \$4.50.

Danish Red Giant Eckendorf

Is of straight, cylindrical form, very blunt, and grows mostly above the surface. Awarded a first-class certificate as a very heavy cropper.

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 20c; lb., 60c.
Not postpaid, 5 lbs., \$2.50; 10 lbs., \$4.50.

New Mangel Half Sugar.

A new variety, more valuable for feeding purposes than the old sorts, it being very much richer. In addition to this, the size and form have been improved until it yields as much per acre as the best Mangels, and twice as much per acre (bulk of roots) as the rich sugar beet. Roots large, very smooth, with few rootlets; creamy white in color, with medium sized tops.

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 20c; lb., 60c.
Not postpaid, 5 lbs., \$2.50; 10 lbs., \$4.50.

Yellow Globe.

Finest type of yellow Globe in cultivation. Roots immense size, fine shape, small tap root, neat top. Flesh being very firm and fine grained, renders it an excellent keeping variety. Well adapted to shallow soils.

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 20c; lb., 60c.
Not postpaid, 5 lbs., \$2.25; 10 lbs., \$4.00

"Sludstrup"
and
"Red
Eckendorf"
have highest
food value
and are
heaviest
yielding
Mangels

Mammoth Long Red.

An improvement on the Long Red. It stands head and shoulders above all other varieties of Mangels; unequaled for yielding and feeding qualities. Grows to a very large size, and will yield 50 tons per acre with ordinary cultivation. If you want a large crop of large Mangels of good quality, don't fail to try this sort. Very uniform, smooth and of good shape. Should be grown in deep loose soil.

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 20c; lb., 60c.
Not Postpaid, 5 lbs., \$2.50; 10 lbs., \$4.00.

Yellow Giant, Intermediate, or Gate Post.

Roots very large, growing over one-half out of the ground; flesh white, sweet and tender; tops bright green, comparatively small; neck small, short. We think perhaps this is the best of the yellow fleshed beets, because its fine flesh never becomes woody and its roots grow so well out of the ground that the crop is easily harvested. An enormous cropper.

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 20c; lb., 60c;
Not postpaid, 5 lbs., \$2.50; 10 lbs., \$4.00.

Golden Tankard.

Considered indispensable by many dairy farmers. They state that they are able to obtain a higher price for milk when feeding cows on Golden Tankard. Sheep thrive on it. Golden Tankard is of a rich, deep yellow throughout. Early, hardy and a heavy cropper; on account of its shape the roots can be left standing close in rows.

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 20c; lb., 50c.
Not postpaid, 5 lbs., \$2.25; 10 lbs., \$4.00

A "SHARPLES" is the only satisfactory Separator and quickly pays for itself. Write us.

BROCCOLI

Broccoli is very much like cauliflower in general appearance and growth, but is harder and will stand more cold and frost. Produces fine heads from late in the fall until early spring, according to time plants are set out. It is a very profitable crop, and is now being planted extensively. Culture same as for Cauliflower.

St. Valentine

The Finest of All Broccoli.

This grand new strain introduced by us is a sure header of immense size, finest quality, and is ready for market in February. The large, solid, handsome, white heads remain in good condition longer than other varieties.

Pkt., 10c; $\frac{1}{4}$ oz., 50c; 1 oz., \$1.50.

Large White French.

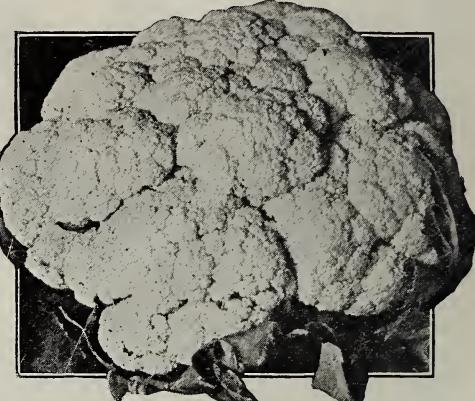
A valuable variety with large, white heads, firm and of good flavor.

Pkt., 5c; oz., 40c; $\frac{1}{4}$ lb., \$1.25.



BRUSSELS SPROUTS

We will grow to
your order any
number or variety
of vegetable
plants.
Order Early



ST. VALENTINE BROCCOLI

Brussels Sprouts

The plants, which are very hardy, grow two or three feet high, and produce, from the sides of the stalk, numerous little sprouts, which resemble very small cabbages one or two inches in diameter. The leaves should be broken down in the fall, to give the little heads more room to grow. They should be treated in all respects like winter cabbage or kale.

Dwarf Improved.

A carefully grown strain, very hardy, and giving compact, round sprouts of large size and good quality. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 35c.

LOOK over our BOOK list

Chervil--Curled.

This plant is used for flavoring soups and salads, and has a strong perfume.

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c.

Cress

Curled, or Pepper Grass.

This salad is much used with lettuce, to which its warm, pungent taste make an agreeable addition. The seed should be sown in drills about 16 inches apart, on very rich ground, and the plants well cultivated. It may be planted very early, but repeated sowings are necessary to secure a succession. Keep off insects by dusting with Pyrethrum Powder. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 20c; lb., 50c.

True Water.

This is quite distinct from the former, and only thrives when its roots and stems are submerged in water. It is one of the most delicious of small salads, and should be planted wherever a suitable place can be found. The seed should be sown and lightly covered in gravelly, mucky lands, along the borders of small, rapid streams, and the plants will need no subsequent culture, as under favorable conditions they increase very rapidly by self-sown seed and extension of the roots.

Pkt., 5c; oz., 35c; $\frac{1}{4}$ lb., \$1.00.

Corn Salad

Fetticus, or Lamb's Lettuce.

A refreshing salad, used extensively in winter and spring as a substitute for lettuce. It is often cooked like spinach. Sown in drills one foot apart, in the spring or fall. On the approach of cold weather cover over with straw or coarse litter.

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 20c; lb., 60c.

Collards

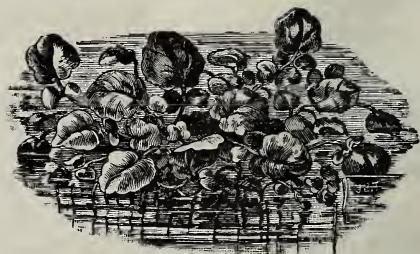
True Georgia.

Used as "Greens" mainly in the South and West. As the leaves are pulled off, others grow in their places

Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 30c.

Chives

See Vegetable Plant List
We supply all vegetable plants in season.



WATER CRESS

CAULIFLOWER

Field of our Mt. Hood Cauliflower, grown by C. W. Kruse Oswego, Ore.



Photo Sept., '12

CULTURE—The Cauliflower succeeds well in any soil where cabbage will grow. But best results are obtained in rich soil with an abundance of water. By sowing early varieties in a hot bed in February or March, or later in a cold frame, fine heads can be obtained quite early. For a later supply sow seed in a prepared bed in May, choosing a cool, moist place. When large enough, transplant, making the rows about two and a half feet apart and eighteen inches between the plants. In dry seasons the crop must be watered.

P. S. Co.'s "Mt. Hood" Early Snowball

The seed that produces those handsome large white solid heads that bring big profits to the gardener. We offer our "Mt. Hood" Cauliflower seed in sealed packets only, under our own label, it having been carefully selected and grown for us by one of the very few expert Cauliflower growers, and is the best strain of Early Snowball obtainable. We especially recommend "Mt. Hood" Snowball for either early or late planting.

Price. Pkt., 25c; $\frac{1}{4}$ oz., \$1.50; oz., \$2.50.

Selected Extra Early Dwarf Erfurt

Remarkable for reliability in heading. Very dwarf, with solid, pure white heads of superior quality. If planted the first of March, heads nine to twelve inches in diameter will be ready early in June.

Pkt., 5c; $\frac{1}{4}$ oz., 65c; oz., \$2.00.

Early Erfurt.

Ordinary strain.

Pkt., 5c; oz., 85c; $\frac{1}{4}$ lb., \$3.00.



Early Snowball.

Ordinary strain. This is the regular grade of Early Snowball that is generally offered, and while it will not give as good results as "Mt. Hood," can be depended upon to produce a good crop.

Pkt., 5c; oz., \$2.00; $\frac{1}{4}$ lb., \$6.00.

Always Buy The Best.

Don't Buy cheap strains of Cauliflower seed. They will surely disappoint you and may cause a serious loss. If you grow for market, or for your own use, buy the **BEST**, our "**Diamond Quality**" select strains. They will produce the large, solid, white heads that can only be obtained from the selected seeds. Liberal applications of Nitrate of Soda and Kanit in Cauliflower culture are of great service. **Send for our Fertilizer Booklet—FREE.**

Danish Giant,—Dry weather Cauliflower

Danish Giant is an early large solid white Cauliflower that can successfully withstand a drought that would prove fatal to other varieties and will thrive splendidly in dry sections, being peculiarly adapted to their growing conditions, but like all cauliflower must have rich soil and cultivation to give best results. **Danish Giant** can also be grown under moist conditions and is a dependable market variety. If your location is subject to drouth or you are "dry farming," be sure to plant **Danish Giant**.

Pkt., 20c; $\frac{1}{4}$ oz., 60c.; oz., \$2.00; $\frac{1}{4}$ lb., \$6.50.

Large Algiers.

A valuable late sort, sure to head, of the best quality and very popular with market gardeners everywhere. Plants large, but of upright growth, the leaves protecting the heads so that they will endure, uninjured, a frost that would ruin other sorts. One of the very best of the late varieties.

Pkt., 5c; oz., 60c; $\frac{1}{4}$ lb., \$1.75

Autumn Giant.

The heads are white, large, compact and thoroughly protected by foliage.

Pkt., 5c; oz., 50c; $\frac{1}{4}$ lb., \$1.50.

We grow to order, for delivery in season, any number or variety of Cauliflower, Cabbage, Kale, Broccoli, Celery, Tomato, Sweet Potato, Pepper or other vegetable plants.

Plants in Season**CABBAGE****Plants in Season**

CULTURE—The requisites for complete success are: First—Good seed. There is no other vegetable where the seed has so much influence on the quality of the product, and gardeners should always use the best procurable. Second—Rich, well prepared ground. Third—Frequent and thorough cultivation. A heavy, moist and rich loam is most suitable, which should be highly manured and worked deeply. Cabbage is universally grown, and specific directions regarding the time and method of planting applicable to all localities cannot be given. In general, the early sorts should be sown very early in hot beds, hardened off by gradually exposing them to night air, and as early as the ground is in good condition transplanted, setting 18 to 36 inches apart, according to size of variety. The late autumn and winter varieties may be sown from the middle to the last of spring and transplanted when four to six inches high. Shade and water the late sowings in dry weather to get them up. It is important that the plants should not be crowded in the seed bed, or they will run up weak and slender, and be likely to make long stems.

**P. S. Co. First Crop.****The Ideal Early Cabbage**

The earliest of all pointed varieties and an ideal sort for the private or market gardener, as it takes but little room, and produces fine, solid heads **ten days ahead of any other cabbage**. We advise all our customers to try this new variety for we believe it is a **sterling novelty of the greatest value**. Nothing superior has yet been offered.

Pkt., 5c; oz., 25c; $\frac{1}{4}$ lb., 60c.

**Early Jersey Wakefield.**

The favorite Early Cabbage with our market gardeners. A sure header. The thick, stout leaves and compact habit make it the best for wintering over and very early setting.

Grown more extensively for market than any other early cabbage. Is always of good size, very solid, and has but few outside leaves; a reliable header and always gives good satisfaction.

Pkt., 5c; oz., 20c; $\frac{1}{4}$ lb., 60c; lb., \$1.75.

**Extra Early Express.**

Produces medium-sized, pointed heads, in 80 to 85 days from sowing of seed.

Pkt., 5c; oz., 20c; $\frac{1}{4}$ lb., 60c; lb., \$1.75.

Early Winnigstadt.

A desirable variety, having conical, solid heads; a sure header under almost any conditions, and keeps better than most early varieties. Fine appearance and of excellent quality.

Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 50c; lb., \$1.50.



EARLY
JERSEY
WAKEFIELD
(True Type)



"FIRST CROP"

**Copenhagen Market**

A new extra early globe-shaped Cabbage slightly flattened. The large solid heads are very uniform, with few outer leaves, keeps well and stands handling. **Copenhagen Market** originated in Denmark, where it is the favorite market variety, and we recommend it to our customers as the best early round head. Gardeners should give it a trial. Our stock is direct from the originator.

Pkt., 15c; oz., 75c.

Henderson's Early Summer.

About ten days later than the Jersey Wakefield. The head is round, and the largest of the early kinds; can be set close in a row, as the outer leaves are small. It remains long without bursting; is firm and of the best quality.

Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 50c; lb., \$1.50.

**Early Spring.****The Earliest Flat-Headed Variety.**

A wonderfully compact plant, with few outer leaves, so that a great number of fine, solid heads can be produced on an acre. Although it does not come to full maturity as early as Jersey Wakefield, it becomes solid enough for use about as early, and is by far the best early sort for those markets that demand a large round or flat cabbage. The plant is vigorous, with short stem. The heads are oval and very large for the size of the plant.

Pkt., 5c; oz., 20c; $\frac{1}{4}$ lb., 60c; lb., \$1.75.

**Early York.**

Small, but very early; very popular sort. Can be planted close together.

Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 50c; lb., \$1.50.

If you grow cabbage, kale, cauliflower, celery—you need a MASTER'S PLANTER
Price, \$4.50. Endorsed by the Washington State Experiment Station, Bulletin No. 6.

CABBAGE—Continued**Popular And Early Varieties.**

EARLY DWARF FLAT DUTCH. Grows low on the stem; a sure header; firm, fine-grained, tender and excellent.

Pkt., 5c; oz., 20c; $\frac{1}{4}$ lb., 60c; lb., \$1.75

EARLY DRUMHEAD. Heads slightly flattened; do not crack; keep well.

Pkt., 5c; oz., 20c; $\frac{1}{4}$ lb., 60c; lb., \$1.75

SUREHEAD. Sure to head; compact; medium to large.

Pkt., 5c; oz., 20c; $\frac{1}{4}$ lb., 60c; lb., \$1.65.

SUCCESSION, OR ALL SEASONS. Heads large, slightly flattened; grow low on the stem.

Pkt., 5c; oz., 20c; $\frac{1}{4}$ lb., 60c; lb., \$1.75.

CHARLESTON, OR LARGE WAKEFIELD. Large and a little later than the Early Jersey Wakefield.

Pkt., 5c; oz., 20c; $\frac{1}{4}$ lb., 60c; lb., \$1.75.

CABBAGE PLANTS.—From February to following August we aim to have on hand large quantities of Cabbage Plants. See Plant Department.

Late Varieties**Diamond Ball Head**

An improved Danish Ball Head, re-selected for many years by our grower, who has been successful in securing a perfect late market sort of just the right size and finest quality. Heads are a little flatter than the older strain and stems shorter, color lighter green, but showing the characteristic reddish veins on the outer leaves. Solid, crisp, and of remarkable uniformity; market growers will get more perfect salable heads from "Diamond" Ball Head than from any other late cabbage.

Pkt., 10c; oz., 30c; $\frac{1}{4}$ lb., \$1.00; lb., \$3.50

Premium Late Flat Dutch.

This is superior to any other late cabbage in cultivation, when large areas are planted for shipping. It possesses all the good qualities of the Late Flat Dutch, and is a sure header.

Pkt., 5c; oz., 20c; $\frac{1}{4}$ lb., 60c; lb., \$1.65.

Autumn King or World Beater.

A sure header, very solid, fine-grained and tender. It grows quicker than any other large cabbage and will produce more to the acre. Color, dark green, with a slight bronze or brownish tinge to the outer leaves. The heads are remarkably thick through, and will attain a great weight. Has a short stem and grows near the ground.

Pkt., 5c; oz., 20c; $\frac{1}{4}$ lb., 60c; lb., \$1.65.

Danish Ball Head or Hollander.

This is one of the hardest cabbages in cultivation and endures both frost and drouth that would destroy other varieties.

Plants rather long-stemmed, but compact; leaves very smooth, but thick; head, of medium size, round and very solid, being the **hardest heading cabbage we know of, and of the very best quality.** Matures quite late, keeps well, and is considered by many the best cabbage to hold over for spring markets.

Pkt., 5c; oz., 20c; $\frac{1}{4}$ lb., .75c; lb., \$2.50

**Well-Known And Popular Late Varieties**

PREMIUM LATE DRUMHEAD. Has no superior in any respect for family and market purposes, either for medium, early or late crop.....

Pkt. Oz. $\frac{1}{4}$ lb. Lb.

5c 20c 60c \$1.75

MAMMOTH ROCK RED. Used for pickling. The heads are very fine and remarkably sure heading.....

5c 20c 60c 1.75

DRUMHEAD SAVOY. Large, compact head; tender and excellent; rich flavor. 5c 20c 60c 2.00

CARROTS

OXHEART
CHANTE-
NAY
ST. VALERY



CULTURE—A sandy loam is the best soil for the carrot, but any good land, if thoroughly and deeply worked, will produce satisfactory crops. Sow as early in the spring as the ground is fit to work, though good crops may be grown from sowing as late as June 15. For table use, sow the smaller kinds in rows 16 to 18 inches apart, and for field culture prepare the ground thoroughly and sow in drills 18 to 24 inches apart. Cover one-half to one inch deep and see to it that the soil is well firmed above the seed.

Earliest Short Horn, or French.

The earliest variety in cultivation, and best suited for forcing. Roots, reddish brown, globular and about two inches in diameter; should be used before full grown.

Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 50c; lb., \$1.50.

Danver's Half Long.

Grown largely on account of its productiveness and adaptability to all classes of soil. Tops, medium sized, coarsely divided. The smooth, handsome roots are of medium length, tapering uniformly to a blunt point; flesh, sweet, crisp, tender; deep orange in color. Although the roots of this variety are short, they produce as large bulk as the longer field sorts, and are more easily harvested. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 90c.

St. Valery.

A popular French Carrot of a deep, rich orange red color, with very straight roots, broad at the top and tapering abruptly near the point. Average length 10 to 12 inches; foliage small. The table quality is excellent and the fact that it yields heavily in light soil makes it useful as a stock carrot. We consider it a valuable variety.

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; lb., \$1.00.

Good and Productive Stock Carrots

Portland Seed Co.'s Yellow Giant.

This new Carrot originated at the Sydney, Australia, Experimental Station, and has proved itself to be the **earliest and most productive stock carrot yet produced**. It is a half long variety, with an **immense broad shoulder**. The Carrot penetrates less than one-half the depth into the ground, which saves about one-half the expense of harvesting the crop. The color is of bright yellow, and is **perfection itself** for giving the proper color to butter. **Every dairyman who wants a big crop of carrots of the right quality and easy of culture should plant our Yellow Giant.**

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; lb., \$1.00.

Improved Short White.

Ranks as a field carrot, owing to its enormous productiveness and the ease with which it can be harvested. Roots half long, smooth, very heavy at the shoulder, but tapering regularly to the point; color, light green at the crown, white below; flesh, rich, white, solid, crisp and of excellent flavor. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 75c.

CARROTS, aside from being one of our most useful and easily grown garden vegetables, are invaluable for stock feeding. They are greatly relished, promote health and put a sleek coat on cattle or horses, giving a well-kept appearance. Dairy and stockmen should grow them extensively. For their special use we recommend our Yellow Giant.

Early Scarlet Horn.

The best early kind for general use. It is larger than the forcing variety, but fully as good in quality, and produces a much larger crop.

Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 40c; lb., \$1.25.

Chantenay.

The Market Gardner's Favorite.

Tops, medium sized; necks, small; roots, tapering slightly, but uniformly stump-rooted and smooth; color, deep orange red; flesh, very crisp and tender. Although this is a medium early sort, it furnishes roots of usable size as early as any; is a heavy cropper, and is **undoubtedly one of the best for both the market and private garden**, while its great productiveness makes it very desirable as a field sort.

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 90c.

Oxheart.

A thick carrot, five or six inches long and very blunt at the lower extremity. It grows very rapidly and the root attains a weight of more than a pound. It is tender and of good flavor.

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 90c.

Large White Belgian.

Extensively grown for stock feeding; very productive. Grows so much above the ground that the entire crop can be pulled by hand.

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 75c.

Yellow Belgian.

Large root; yellow flesh; good keeper for late feeding.

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 75c.

Portland Seed Co.'s Improved Long Orange.

Popular for farm use on deep, mellow soil. Our stock is an improvement obtained by years of careful selection of the best formed and deepest colored roots, which grow to a large size, some specimens averaging twelve inches in length. Enormous crops can be grown under fair culture; one of the best varieties for feeding stock.

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 75c.

CELERY

CULTURE—Sow the seeds early in a hot-bed or cold frame. When three inches high, transplant, setting them four inches apart. When grown six inches, and fine, stocky plants, set in richly manured, deep soil, in rows three and a half feet apart and about nine inches from plant to plant. Water, if dry weather follows transplanting. During the next two months all the attention that is required is to keep down the weeds. Afterward, earth up a little, and continue doing so at intervals until only the tops of the leaves are visible late in the autumn. Never hoe up the earth when plants are wet. One ounce of seed produces about six thousand plants.

White Plume.

The Leading White Celery

A handsome, crisp sort, of very easy cultivation. Naturally its stalks and portions of its inner leaves and heart are white, so that by closing the stalks either by tying or by simply drawing the soil up against the plant and pressing it together, the work of blanching is completed without the troublesome process of "banking" or "earthing up." It is the earliest celery known.

Pkt., 5c; oz., 20c; $\frac{1}{4}$ lb., 65c; lb., \$2.00.

Large White Solid.

Of vigorous growth, white, crisp, tender; fine, nutty flavor.

Pkt., 5c; oz., 20c; $\frac{1}{4}$ lb., 60c; lb., \$1.75.

Golden Heart, or Golden Dwarf.

Solid, of fine, nutty flavor; excellent.

Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 50c; lb., \$1.50.

Winter Queen

This is without doubt the most valuable variety of celery for winter and spring use ever introduced. Has double the amount of heart of any known celery. The plant is beautiful in appearance, of close habit and compact growth, and blanches to a beautiful cream-white. Ribs perfectly solid, crisp, and having a delicious nutty flavor.

Stored for winter or spring use, it is an excellent keeper and when taken out the blanched stalks will be firm and crisp; entirely free from strings; brittle and of sweet flavor.

Pkt., 10c; oz., 35c; 2 oz., 65c; $\frac{1}{4}$ lb., \$1.00.

Giant Pascal.

Largest variety grown; of fine, nutty flavor; very easily blanched.

Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 50c; lb., \$1.50.

Celery Seed.

For flavoring
Oz., 10c; $\frac{1}{4}$ lb., 15c; lb., 50c.



GOLDEN SELF
BLANCHING

Golden Yellow Self-Blanching.

This is no doubt the best celery for early spring market use. Plants of a yellowish green color when young, but as they mature the inner stems and leaves turn a beautiful golden yellow, which adds much to their attractiveness and makes the work of blanching much easier.

Pkt., 10c; oz., 60c; $\frac{1}{4}$ lb., \$2.00.

Celeriac or Turnip-Rooted Celery

Large Smooth Prague.

An improved form of turnip-rooted Celery; round, smooth, with very few side roots. This is the largest variety and one of the very best.

Pkt., 5c; oz., 20c; $\frac{1}{4}$ lb., 60c.

Chicory

Extensively used to adulterate coffee and as a substitute for it. The culture is the same as for carrots. Dig at about the same time as carrots, wash, slice, and dry by artificial heat. The blanched leaves are used by some for salad.

Large Rooted or, Coffee.

The best kind.

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 75c.

SEND US YOUR ORDERS FOR PLANTS

We can supply celery and other vegetable plants in any quantity. See Plant Department.



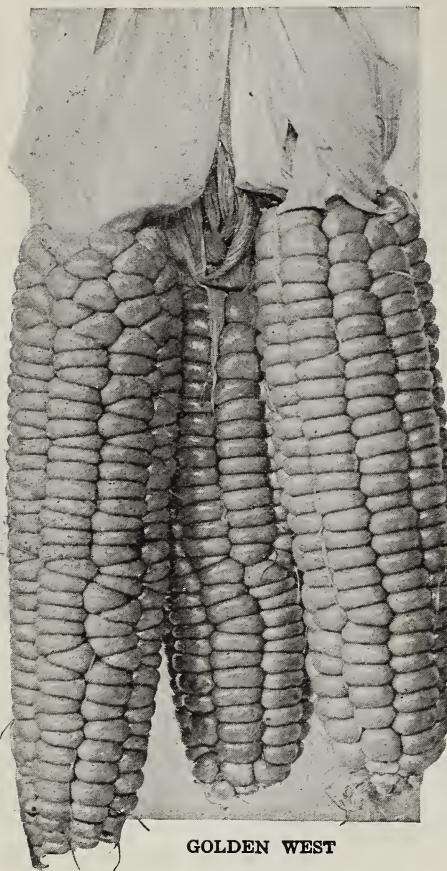
"Celery
for
Profit"

30c post-
paid.
See Book
List

SWEET CORN

For best results in growing corn of any kind DO NOT plant until the ground is warm and DO NOT plant TOO DEEP; neglect of these two precautions has caused many failures.

 Add 10c to lb. Price for Postage on Corn.



GOLDEN WEST

"Great Success—More Than Pleased"

Ashland, Ore., Feb. 1, 1912.

Gentlemen: The seed I got of you last year has more than pleased me and also my neighbors. I had great success with them and can certainly recommend them highly.

I had especially good results from your Oregon Pole Lima and the Cauliflower. The Golden West Corn is really the best I have ever eaten. The Lazy White Bean and also the New Stringless I think are very luscious Beans. I cannot praise your seeds too highly.

Yours for success,

Well-Known and Standard Varieties.

 All varieties 10c per packet, postpaid.—Add 10c. to pound price if wanted by mail.

	Per lb.	Per 10 lbs.
ADAMS' EXTRA EARLY.	10c	\$0.90
BLACK MEXICAN.	15c	1.00
COUNTRY GENTLEMAN.	15c	1.25
MAMMOTH SWEET.	15c	1.00

Golden West.

The Sweetest, Richest Corn Ever Grown—
To be sure of the right strain
buy direct from us.

Our **Golden West** still maintains its position as the sweetest, richest, best yielding, Sweet Corn ever grown, nothing having ever been produce that will compare with it in any way. **Golden West** is extremely hardy, can be planted earlier than other varieties, and, being of dwarf habit, can be planted closer than other sorts. It is the very best corn for market or home gardens, where earliness and quality are considered. The color is a rich, creamy yellow, deepening to golden as it matures, and the quality is so fine that you must try it to appreciate how good corn can be.

Pkt., 10c; lb., 15c; 10 lbs., \$1.25.

Peep O'Day.

Ten Days Earlier Than Any Other—Sweet,
Early, Productive.

For flavor, sweetness and productiveness it is ahead of any other early white sweet corn. It will prove a money-maker for the market gardener, and a valuable addition to our list of corn for our short Western summers.

Pkt., 10c; lb., 15c; 10 lbs., \$1.15.

Early White Cory.

MAMMOTH

The stalks are no larger than those of the White Cob Cory, but each stalk furnishes two or more large, fine-shaped ears, which are fit for use before those of most other sorts. The ears are 12-rowed, very symmetrical and handsome. The grain is large, broad, very white and of remarkably good quality.

Pkt., 10c; lb., 15c; 10 lbs., \$1.00.

Early Evergreen.

The Best Second Early Sweet Corn.

In the New Early Evergreen we have a selection possessing every good quality of Stowell's Evergreen, and resembling it in every respect, except that the stalk is about one foot shorter, more closely jointed, and that it will mature for market ten to fourteen days earlier.

Pkt., 10c; lb., 15c; 10 lbs., \$1.00.

Early Minnesota.

This old and deservedly popular variety is one of the best early sorts for the market and the private garden.

Pkt., 10c; lb., 15c; 10 lbs., \$1.00.

Stowell's Evergreen.

Remarkable for remaining a long time in a fresh condition suitable for the table. Hardy and productive, and the best late variety for general use.

Pkt., 10c; lb., 15c; 10 lbs., 90c.

SWEET CORN—Continued.

Oregon Evergreen.

We offer **Oregon Evergreen** as the finest main crop Sweet Corn. The flavor and sweetness can not be excelled and the extreme whiteness of the large ears makes it very beautiful and valuable for canning. It is large and the stalks produce more ears than any other variety and have a very heavy husk over the grains, protecting them from insects and keeping the ears fresh a long time after cutting.

Oregon Evergreen is a hardy, vigorous grower, and is the ideal Corn for market gardeners.

Pkt., 10c; lb., 15c; 10 lbs., \$1.25.

New Sweet Corn—Livingston's Early Sugar.

A grand new "dry weather" corn. Even after severe drouth, the stalks look as fresh and green as in the spring and the ears are well filled and perfect. In favorable seasons it will produce ears fit for table in 60 days from planting. Ears averaging 7 inches long contain from 12 to 14 rows of deliciously sweet, pure white kernels on white cob.

Sixty per cent of stalks in the field carry two perfect ears. They are of faultless shape, invariably filled well to the tips.

Livingston's Early Sugar does not stool, but produces strong, sturdy plants which resist wind admirably. They stand up well, average 6 feet tall and furnish an abundance of fine fodder.

Pkt., 10c; lb., 25c.



Pound prices on Corn do not include postage; add 10c extra per pound if wanted by mail.

Field Corn

THREE is no longer any doubt as to Corn being grown successfully in the Northwest, and careful tests have proven the following to be adaptable to our coast climate. As a fodder crop corn cannot be excelled and cut green and packed in silos it makes a valuable green feed for milch cows.

Minnesota King (Dent).

Recommended by the Agricultural College as the best variety for Western Oregon and Washington. Smallest cob and largest grain. The ears are uniformly well filled out. Makes more shelled corn to a given bulk of ears than any other variety. Golden yellow and a good yielder.

1 lb., 10c; 10 lbs., 75c.

Wisconsin White Dent.

Wisconsin White Dent is a large, handsome White Dent, extremely early and matures perfectly, and is the best White Dent Corn for Oregon and Washington.

1 lb., 10c; 10 lbs., 50c.

Champion White Pearl.

A large, white late dent variety; very popular with our dairymen on account of the great amount of green feed it makes. 1 lb., 10c; 10 lbs., 50c.

Pride Of The North, or Yellow Dent.

Recommended after repeated tests, by the Agricultural College, as the best for Eastern Oregon, Washington and Idaho. A quick growing dent variety, thriving well where the summers are not very long. Bright golden color.

1 lb., 10c; 10 lbs., 60c.

Australian White Flint.

A growing test of three seasons has demonstrated the adaptability of this valuable variety to Northwestern conditions. It is earlier than the well-known "Eight-Row Canada," and is to be preferred on account of its color, productiveness and very early ripening.

1 lb., 10c; 10 lbs., 60c

Well-Known and Standard Varieties.

	Per lb.	Per 10 lbs.
EARLY CANADA (Flint). An eight-rowed Yellow Flint Corn; early and very productive.....	10c	\$0.60
KING PHILIP. An early Red Corn; well acclimated and well known.....	10c	.60
LEAMING (Early). Corn yellow; grain small; weighty; productive.....	10c	.50
EARLY WHITE FLINT. Productive, early and of beautiful appearance.....	10c	.50
FODDER SWEET CORN. Mixture for soiling and green fodder.....	10c	.60
WHITE RICE. Best variety for popping corn.....	10c	.75

All sorts of Field Corn, 10c. per packet; prices per 100 lbs. on request.

OREGON POLE LIMA

Latourelle Falls, Ore.

Aug. 18, 1912.

Gentlemen: I have a thousand hills of Limas, the same variety I had when you were out here and the only variety I have ever tried. They do so well here and are such a fine bean that I did not care to try any other variety. They are hanging full of beans now.

Very truly yours,

Bothell, Wn., Aug. 22, 1912.

Gentlemen: The Oregon Pole Lima Beans are a splendid success: instead of growing 5 feet high as per your Catalog, they would have grown 8 or 9 feet if I had cut the poles long enough. In fact everything I got from you proved very satisfactory. The American Wonder Potatoes are all spoken for to be used as seed next year by my neighbors.

Yours truly.

CUCUMBERS

CULTURE—Cucumbers need a warm, rich soil, and should not be planted in open ground until the weather is settled, as otherwise they will not thrive. Plant in hills four feet apart each way, thinning to three or four of the strongest plants, after danger from insects is passed. As fast as the cucumbers attain suitable size they should be taken from the vine, whether required for use or not, as their ripening soon destroys the vine's usefulness.



PEERLESS
EARLY
WHITE
SPINE

*Try the
LEMON CUCUMBER
Prolific, Delicious,
Wholesome*

"Diamond" Long Green.

The leading large variety. Fruit from ten to twelve inches long, dark green, crisp and tender. A good variety for slicing, and when ripe they are the best for sweet pickles. We offer our "Diamond Strain"—they will grow long and uniform in shape.

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 85c.

Peerless, or Early White Spine.

One of the best sorts for table use, fruiting early and abundantly. Fruit uniformly straight and handsome; light green, with a few white spines.

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 80c.

Cumberland Pickling.

The vines are hardy, strong, and fruit very freely. The straight young fruits possess the distinctly roughened surface so much desired for small pickles. The large fruits average nine to ten inches in length, two and a half inches in diameter, with full rounded ends, and are of good quality for slicing.

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 85c.

Gherkin For Pickling.

A very small, oval, prickly variety, quite distinct from all others.

Pkt., 5c; oz., 20c; $\frac{1}{4}$ lb., 60c.

Telegraph.

A standard forcing variety, very popular with gardeners. Fruit fourteen to sixteen inches long, of very fine quality. A sure and heavy cropper.

Pkt., 25c,

Boston Pickling, or Green Prolific.

Color, bright green, and a great producer. The fruits average four to five inches in length when large enough for slicing, and are of excellent quality; but it is for producing medium sized pickles that this variety is so highly esteemed.

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 80c.

"The Davis Perfect" Cucumber.

The "Davis Perfect" is of perfect form, large size and of the finest color; is crisp, delicious and almost seedless.

The "Davis Perfect" is as handsome, grown outside, as any hothouse Cucumber.

Mr. Davis is the originator of the Davis Wax Bean and the Grand Rapids Forcing Lettuce. His Cucumber is equally valuable.

Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 50c; lb., \$1.25.

Short Green, or Early Frame.

An excellent sort for both table use and pickling. Fruit straight, small at each end, bright green, with crisp, tender flesh. Comes into use a little later than the Early Cluster and keeps green a long time.

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 75c.

Early Russian.

Earliest and hardest. Very vigorous and productive. Fruit three to four inches long, thick, oval, pointed at each end, and covered with fine, small spines.

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 75c.

Early Cluster.

Fine, vigorous, producing the bulk of the crop near the root and in clusters. Fruit short, with uniformly thick end, dark green, but paler at blossom end. A very productive sort.

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 75c.

Japanese Climbing.

A useful variety for growing on a trellis or wire. The cucumbers are long, of a dark green color, white flesh, crisp, and of a good flavor.

Pkt., 10c; oz., 20c; $\frac{1}{4}$ lb., 60c.

Lemon Cucumber.

This dainty little cucumber resembles a lemon both in form and color, having a distinctive flavor superior to and not found in any other cucumber. The Lemon Cucumber is so prolific that a single vine will be ample for the needs of the average family. It is also said that the Lemon Cucumber can be eaten without fear of the harmful results that some experience from eating cucumbers.

Price: Pkt. 5c; Oz., 25c; $\frac{1}{4}$ lb. 75c; per lb. \$2.00.



Our Fertilizer Book Gives Plant Food Value of All Fertilizers — Mailed Free

Egg Plant

Should be started in a hotbed and transplanted when the weather is settled and the ground thoroughly warm. They will thrive with the same treatment as that given the tomato.

Black Beauty

An extra early, quick-growing, vigorous variety, handsome and very uniform. Color, deep blackish purple. Splendid market sort.

Pkt., 10c; oz., 40c; $\frac{1}{4}$ lb., \$1.25; lb., \$4.00.

Early Long Purple.

The earliest and hardiest; very productive; fruit from six to ten inches long.

Pkt., 5c; oz., 30c; $\frac{1}{4}$ lb., 75c.

New York Improved, Large Purple.

The leading market variety. Large, round, dark, excellent and the most productive.

Pkt., 5c; oz., 30c; $\frac{1}{4}$ lb., \$1.00.

Black Pekin.

Oval round, of medium size, very dark, glossy and handsome.

Pkt., 5c; oz., 30c; $\frac{1}{4}$ lb., 80c.



BLACK BEAUTY

Endive

This is a hardy vegetable, cultivated principally for a winter salad. Sow from May until August for a succession of crops; tie the leaves closely together to blanch them.

White Curled.

A beautiful variety, with curled, mossy leaves. for early use.

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c;

Green Curled.

Standard sort for fall and winter.

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c.

Broad Leaved Batavian (Escarolle)

Has broad, thick leaves, which form a large, loose head.

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c.

Garlic

Used same as onions. Sets, per lb., 20c; postpaid, 30c.

Horse Radish Roots

For prices and description, see Plant Department.

Kohl Rabi

Hardy and of easy culture. Grown from plants the same as cabbage. The Kohl Rabi is a vegetable intermediate between the cabbage and turnip, and combines the flavor of both. The edible part is a turnip-shaped bulb formed by the swelling of the stem. Kohl Rabi is far superior to cabbage or turnips in the delicacy of its flavor, and is a splendid addition to every garden. It should be eaten before growth ceases.

Early White Vienna.

Very early; bulb white; best table variety.

Pkt., 5c; oz., 20c; $\frac{1}{4}$ lb., 60c.

Early Purple Vienna

Same as above, except in color, which is purple.

Pkt., 5c; oz., 20c; $\frac{1}{4}$ lb., 60c.

KALE

Kale, or Borecole, is a kind of cabbage that does not form a close and solid head, but a cluster of beautifully curled or wrinkled leaves that are tender and of excellent flavor. It requires the same treatment as cabbage; is very hardy, being improved by frost.

Emerald Isle.

Finest Kale in the World.

This is really the handsomest Kale that has ever come under our notice; and is entirely distinct from other strains, very hardy, of medium height, and very vigorous, throwing out new shoots as fast as the leaves are used, and will furnish excellent greens all winter. The closely curled, handsome leaves are most attractive and of fine flavor. A fine exhibition plant.

Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 30c.

Tall Green Curled Scotch.

Grows about two feet high; leaves dark green, curled and wrinkled; very hardy and is improved by a light frost.

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c

HALF DWARF MOSS CURLED. Medium sized leaves, nicely curled. Pkt., 5c; Oz., 10c; $\frac{1}{4}$ lb., 30c

DWARF GREEN CURLED. Leaves beautifully curled and bright green.

Pkt., 5c; Oz., 10c; $\frac{1}{4}$ lb., 25c

LEEK

The Leek belongs to the Onion family. Prized for soups. Cultivation similar to that of onions, but hill up about the neck to blanch it.

Large Rouen, or American Flag.

A large, favorite American sort.

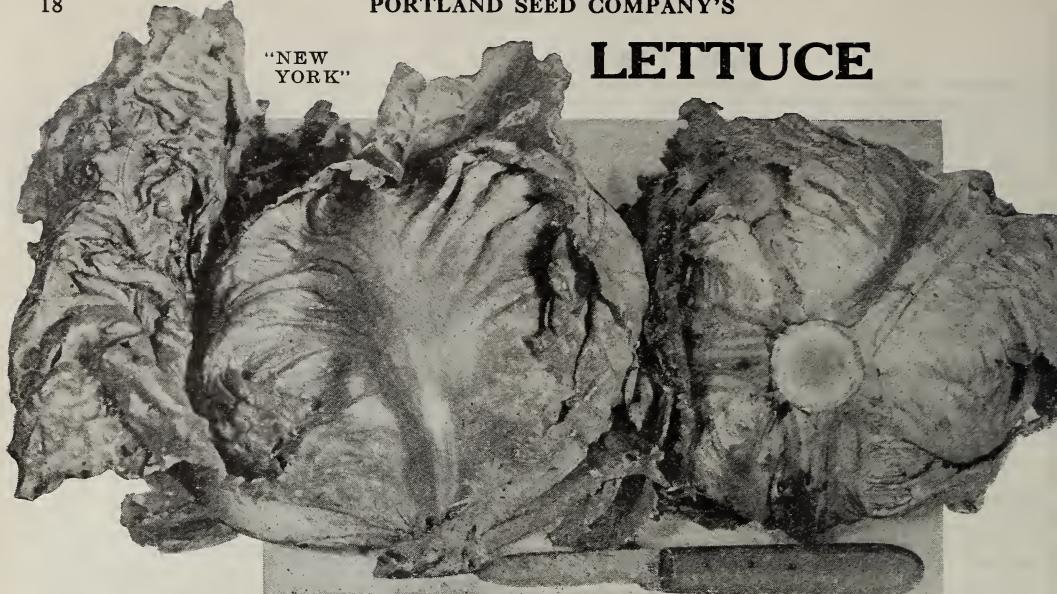
Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 40c; lb., \$1.25.



For Thousand Headed Kale — See Field Seeds.

LETTUCE

"NEW
YORK"



LETTUCE is so extensively grown that cultural directions seem unnecessary, but we offer a few simple suggestions that may save a later disappointment, as any failure is generally blamed to the seed. This should not be, as Lettuce, like many other vegetables, requires very rich soil, plenty of water, a cool growing season and intense culture to produce the best results. If the earliest varieties are planted out in the spring, and the weather turns dry and hot, they will run up to seed without heading. The same seed sown in the fall or with cooler growing weather would develop perfectly. At a temperature of 40 degrees or lower lettuce will not thrive. At 65 degrees and upward it has a tendency to run up and not head properly. For outside planting sow the seed in shallow drills from one to two ounces to the 100 yards. An ounce will produce 3,000 plants. Four pounds should plant an acre. Lettuce matures in forty to sixty days from time of planting.

New York or Wonderful

This is the mammoth head lettuce so popular in California from whence it is shipped to the Northern markets, arriving in splendid condition. The immense heads are solid, heavy, beautifully blanched to a creamy white with bright green outer leaves. The quality is unsurpassed, being tender, crisp and sweet. New York is a hardy, rapid grower, deep rooted and resistant to drought; a slow seeder and sure to head.

Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 50c; lb., \$1.50.

California Cream Butter

A fine large butter head lettuce of the richest flavor, tender, sweet and crisp; a great favorite in California, being a popular market variety, medium early.

The heads are very broad, often measuring eight inches across and continue to grow for two or three weeks after they are ready to use, and are very slow to seed.

Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 40c; lb., \$1.25.

Grand Rapids-For Early Forcing.

As a Lettuce for greenhouse forcing this variety undoubtedly stands at the head of the list. Of quick growth, and stands for some days after being fit to cut. The plant is upright, and forms a loose head or cluster of large, light yellowish green leaves, slightly crimped and blistered, rather thin, good flavor, crisp and tender. It will stand shipping better than most curled sorts.

Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 35c; lb., \$1.25.

May King.

A large growing, smooth leaved, richly flavored sort, which we believe will be the best of all smooth leaved Lettuces. Plant, light green, with round leaves, which form into a very solid, compact, round head; stands a long time without running to seed. Leaves very thick, folded or puckered at the base, inner ones blanch to a rich, golden yellow. **Exceedingly rich, tender and buttery.** Fine for open ground or forcing. For succession plant in spring, then in August and again in September.

Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 25c.

Portland Seed Company's New Crispette.

Our "New Crispette" is a beautiful lettuce, the quality of which is simply perfect. The large, curly leaves, which cover the outside of the solid heads, are of a bright, light green. The unusual solidity of the heads is insured by the large, white, main ribs of the leaves, each of which curving strongly toward the center, makes it impossible for the leaves to open outward and expose the center, which will always be found crisp, tender, sweet and melting. It matters not whether grown to head in the early spring or the hottest days of summer, the leaves are always **crisp and tender.**

Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 35c; lb., \$1.25.

Diamond P. S. Co.'s "Diamond Early."

Earliest, largest, most solid, and surest heading of the early head varieties. The fine, large heads are tightly folded, having few outer leaves, which are of a light green color, the inner ones being blanched to a beautiful buttery yellow.

"Diamond Early" is the ideal lettuce for early heads or successive planting, and its rich flavor and quality is unsurpassed.

Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 50c; lb., \$1.50.

All Seasons.

A valuable new "Butter Head" Lettuce; the best main crop variety, as its large heads continue to grow for two or three weeks after they are ready to use, and are very slow to seed. The heads are flattened on the top and very broad, often measuring eight inches across.

"All Seasons" is headed up ready for use in less than ten weeks from planting. Color of outer leaves is a bright green, with inner leaves blanched to a rich golden yellow; very crisp and of excellent flavor. Be sure to try "All Seasons."

Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 35c; lb., \$1.25.

LETTUCE—Continued

Henderson's Immensity.

Of the largest size and finest quality, even the outer leaves being tender. Slow to run to seed and maintains that crispness of texture and and sweetness of flavor so much desired, and has heat-resisting qualities which carry it safely through the hot summer. It is not early, but is absolutely reliable for a late crop at a season when other varieties are hard to procure.

Pkt., 5c; oz., 15c; ¼ lb., 35c.

Brown Dutch.

Forms a large, solid head, sweet, tender and of good flavor. Outer leaves are tinged with brown. Very hardy.

Pkt., 5c; oz., 15c; ¼ lb., 35c; lb., \$1.25.

Hanson.

Improved Hard Heading Stock.

One of the very best. Heads green outside and white inside; grow to a remarkable size, very solid, and is deliciously sweet, crisp and tender. It withstands the hot sun well.

Pkt., 5c; oz., 15c; ¼ lb., 35c; lb., \$1.25.

Deacon.

Heads very solid and of excellent flavor, remains in condition for use as long as any variety in cultivation. Plant medium sized, with very few outer leaves, which are deep green and very thick, while the inner ones blanch to a bright yellow and are exceedingly well flavored, crisp and tender. This is certainly one of the best varieties for summer use.

Pkt., 5c; oz., 15c; ¼ lb., 30c; lb., \$1.00.

Large Drumhead.

One of the largest heading kinds, but the heads are not so solid as the Hanson or Deacon.

Pkt., 5c; oz., 15c; ¼ lb., 30c; lb., \$1.00.

MUSTARD

Mustard is used alone as "greens," or with cress as salad. Sow any time in the spring, in rows, and thin out as necessary.

Fordhook Curled

Beautiful dark green, finely curled plume-like leaves that are of distinctive flavor; superior to spinach as greens and is fine for salads. Fordhook Curled is vigorous and productive.

Pkt., 5c; oz., 10c; ¼ lb., 30c; lb., 90c.

SOUTHERN GIANT CURLED. We offer a fine strain of the true curled leaf.

Pkt., 5c; oz., 10c; ¼ lb., 15c; lb., 50c.

WHITE ENGLISH. Leaves mild, tender when young; seeds yellow. **Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 40c.**

Mushroom Spawn

With intelligent care and good spawn, mushrooms can be made to pay handsomely. They can be successfully grown in a dry cellar, under the benches of a greenhouse, or in sheds, where the temperature can be kept from 50 to 60 degrees through the winter. Our free pamphlet gives general instruction.

Lambert's Pure Culture.

A new kind of spawn, without a doubt the best; much superior to the common English. It comes in bricks, weighing about 20 ounces. These are broken up into pieces the size of a walnut and put into the bed one foot apart each way. Price, per brick, 25c; postpaid, 40c; by express, not prepaid, 5 bricks, \$1.00.

MUSHROOMS. How to Grow Them. By Falconer. 162 pages. Postpaid, \$1.10
MUSHROOM CULTURE and Pure Culture Spawn. 32 pages. 35c. Postpaid

Salamander

For Hot Dry Sections.

A fine medium early lettuce of good size, forms compact heads, crisp, tender and of a fine buttery flavor. Creamy white head with outer color light green; stands drought well and is slow to seed.

Pkt., 5c; oz., 15c; ¼ lb., 40c; lb., \$1.25.

Early Prize Head.

Standard sort; one of the best thin leaved, clustering varieties. The very large leaves are savoyed or crimped, bright green, tinged with red, and are exceedingly tender, crisp and sweet, forming a large, loose head. One of the best for the garden, but not good to ship long distances.

Pkt., 5c; oz., 15c; ¼ lb., 30c; lb., \$1.00.

Black Seeded Simpson.

Forms a close, compact mass of curly leaves of a yellowish green.

Pkt., 5c; oz., 15c; ¼ lb., 30c; lb., \$1.00.

Simpson's Early Curled.

A leading market variety used for very early planting and forcing. Forms a dense mass of finely curled and wrinkled leaves that are excellent and tender, and do not wilt readily.

Pkt., 5c; oz., 15c; ¼ lb., 30c; lb., \$1.00.

Early Tennis Ball.

The plant is small, of rapid growth, and should be used as soon as large enough, as it quickly runs to seed. Leaves dark green, thick and crisp. One of the best for growing under cover, and for forcing.

Pkt., 5c; oz., 15c; ¼ lb., 30c; lb., \$1.00.

White Paris Cos.

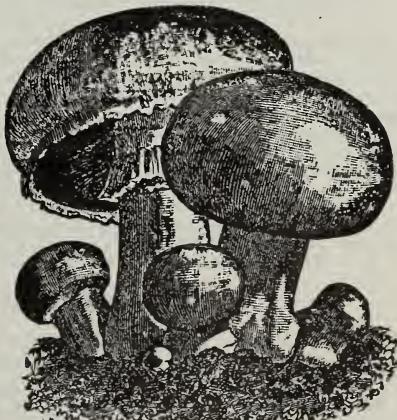
A distinct variety, forming oval, upright heads, largest near the top. It is hard, tender and crisp, and does not run to seed so quickly as other companies' varieties.

Pkt., 5c; oz., 15c; ¼ lb., 30c; lb., \$1.00

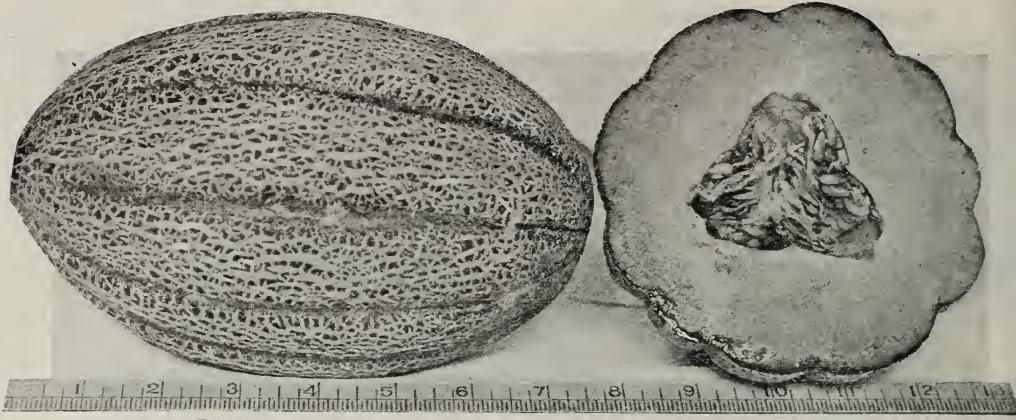
Chinese Mustard

Less pungent than other varieties, Chinese Mustard is most delicious, thriving at the same season and under conditions that are favorable to spinach. A splendid addition to our gardens.

Pkt., 5c; oz., 10c; ¼ lb., 15c; lb., 40c.



MUSKMELONS



BURRELL GEM

Culture.

PLANT in hills four to six feet apart each way, after danger of frost is past and ground is warm; enrich well with well-rotted manure and plant the seeds just under the surface, not too deep. One ounce to fifty hills; two to three pounds per acre.

Melons thrive best on warm, light soils, but good crops are obtained on heavy ground if it is rich and well drained; in cultivating, hill up by drawing the soil toward the plant. Use Bug Death, lime, slug shot or land plaster for destroying insects.

Burrell Gem

The Perfect Melon for Market or Home Gardens

Burrell's Gem has a tough, thin rind, well arched ribs, covered with a closely interlaced gray netting; shape elongated, being about $4\frac{1}{2}$ inches in diameter by 6 inches long, flesh of a reddish orange, very thick, fine grained and spicy, seed held firmly in a triangular cavity. This is the secret of a good shipping melon. If the seeds shake loose easily a melon will quickly decay.

Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 40c; lb., \$1.25.

Rocky Ford or Netted Gem.

The most popular and best seller among Muskmelons. The fruit is oval, slightly ribbed, densely covered with coarse netting. Flesh thick, green, very sweet and highly flavored. The fruit is wonderfully uniform in shape and quality. Grown largely in Colorado and shipped in carload lots all over the country. The favorite with market gardeners everywhere.

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; lb., \$1.00.

Cassaba.

This is an excellent melon and much sought after. Large, rather oblong; well ribbed; skin thin, and of greenish yellow color; flesh two to three inches thick, delicious and melting. None better; matures late; keeps well.

We offer two varieties, both excellent market sorts, late keepers and good shippers. The **Bidwell Winter** is the largest type grown; has small seed cavity, is fine-grained and delicious.

The smaller round type is the **Hubbard Winter**, equally fine in every way. These are the choicest strains, from one of California's best growers.

Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 50c; lb., \$1.50.

Well-Known and Popular Varieties.

	Pkt.	Oz.	$\frac{1}{4}$ lb.	Lb.
JENNY LIND. Extra early, flesh green, fine flavor.....	5c	15c	35c	\$1.00
EXTRA EARLY HACKENSACK. Flesh green, delicious, juicy and sweet; medium size.....	5c	15c	35c	1.00
LARGE YELLOW CANTALOUE. Early and productive; flesh salmon color, rich, sweet.....	5c	15c	35c	1.00

"DIAMOND" FERTILIZERS are an investment, not an expense, and will repay many times their cost.—Ask for Free Booklet.

WATERMELONS

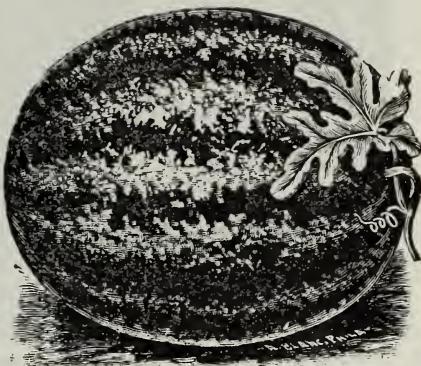
CULTURE.—Watermelons thrive best on light, well drained soils, but give good results on any good rich garden soil that is properly drained and cultivated. Plant after the weather is settled and ground warm. Hills should be eight feet apart each way and with well rooted manure thoroughly worked into each hill. One ounce of seed will plant thirty hills; two to three pounds per acre. Thin to two or three plants per hill.



Tom Watson

This excellent new melon is of elongated form, averaging 18 to 24 inches in length, 10 to 12 inches in diameter, has a thin dark green rind and deep red flesh; crisp and sugary, with a lusciousness and distinctive flavor that makes it one of the finest melons ever produced; is hardy, early and stands handling and long shipment. We consider it a valuable market or home variety.

Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 40c; lb., \$1.25.



Sweet Heart.

This melon has become very popular as a shipping melon. Vine vigorous and productive, ripening its fruit early. Fruit large, oval, very heavy, uniformly mottled dark and very light green; rind thin, but firm; flesh bright red, firm, solid, but very tender, melting and sweet. Fruit retains its good quality for a long time after ripening.

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 65c.

Halbert Honey Watermelon

This superb Melon is a great improvement over the well-known Kleckley Sweets, as it fully equals it in delicious flavor and crispness, is more uniform in outline, darker in color, more vigorous and productive, and will ripen melons perfectly in the cooler sections where other varieties fail. The average length is eighteen to twenty inches, both ends being blunt and fully rounded out. The rich, dark glossy green, the thin rind and the bright crimson center make the new Halbert Honey the most attractive Watermelon.

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; lb., \$1.00.

Kleckley's Sweet, or Monte Cristo.

A splendid sort for home use or near markets. Vine vigorous and productive; fruit of medium size; oval; color dark, mottled green in two shades, forming indistinct stripes. Flesh, a beautiful bright rich red; exceedingly sweet and tender.

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 65c.

Cuban Queen.

A very fine variety, growing to a great size; flesh bright red, solid and sweet. The skin is beautifully striped dark and light green. Melons are wonderfully solid; rind thin. They are enormously productive and ripen early.

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 65c.

Ice Cream, or Peerless.

A grand favorite and standard variety. Superior in every respect. Has beautiful crimson core, which is always fine grained; can not be surpassed in flavor; very prolific.

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 65c.

Fordhook Early.

A fine, extra early melon. Fruit of good size; skin dark green; flesh bright and crisp, sweet and good quality; rind thin, but tough. Good shipper.

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 65c.

Well-Known and Standard Varieties

	Pkt.	Oz.	$\frac{1}{4}$ lb.	Lb.
DARK ICING. Early, round, solid, with thin, dark green skin; of superb quality . . .	.5c	10c	25c	65c
GRAY MONARCH, or Long White Icing. Very large; long; crimson flesh . . .	.5c	10c	20c	65c
FLORIDA FAVORITE. Large and long; rind firm; flesh deep red . . .	.5c	10c	20c	65c
KENTUCKY WONDER. Oblong; flesh scarlet, crisp, tender, rich . . .	.5c	10c	20c	65c
PHINNEY'S EARLY. Early, hardy; flesh pink, very sweet, tender and crisp . .	.5c	10c	20c	65c
GYPSY, or Georgia Rattlesnake. Oblong, dark and striped; bright red flesh .	.5c	10c	20c	65c
CITRON. (Red or Green Seeded). Round and handsome; for preserving only .	.5c	10c	25c	75c

For Newest and Best Roses, Finest Dahlias, and Thrifty, Vigorous, True to Name Plants, Roots Vines, etc., see Plant Department or send for our new 64-page Nursery Catalog. **FREE ON REQUEST.**

ONIONS



Photo of Oregon Yellow Danvers grown in common garden soil by Mr. Draper. Diamond Quality Fertilizers were used.

CULTURE.—The Onion thrives best in a rather **deep, rich, loamy soil**, and unlike most vegetables, succeeds well when cultivated on the same ground for successive years. The best culture requires that the ground should be deeply dug and heavily manured with well rotted manure a season or two previously. Sow as soon as ground can be prepared in the spring.

Portland Seed Co.'s Oregon Yellow Danvers

This is the variety generally planted in the Northwest. The largest crops of onions and the best keepers, bringing the highest prices on the Pacific Coast markets are the **Oregon Yellow Danvers**. The bulbs are uniformly large, of a half-globe in shape, with small necks, and as a market or table onion can not be excelled.

Our seed is grown specially for us by the best onion seed growers in Oregon. No onion grower can afford to plant anything inferior when such seed can be obtained.

Pkt., 5c; oz., 20c; $\frac{1}{4}$ lb., 60c; lb., \$2.00.

Ailsa Craig

This fine new onion comes to us from the English growers and has won in their shows for years over all varieties; for either early or late sowing it has no equal. For best results it should be started inside early and transplanted. This treatment gives wonderful results in size and yield; 800 to 1000 bushels per acre can be grown in this way.

AILS A CRAIG is large, globe shape, straw colored, having no rival in form, size or weight. The quality is superb, being mild, crisp and delicious. The attractive appearance, delicate flavor and large size always make Ailsa Craig in great demand.

Pkt., 10c; oz., 35c; $\frac{1}{4}$ lb., \$1.00.

Crystal Wax

A pure white, extremely early, flat onion of the Bermuda type; very sweet and delicious and so clear and waxy that it appears translucent. We offer the true stock, importing the seed direct from the Canary Islands.

Pkt., 5c; oz., 40c; $\frac{1}{4}$ lb., \$1.25.

White Bermuda

A beautiful market variety for fancy trade; color a delicate pinkish straw; flavor very mild. The finest strains come to us from Teneriffe—Canary Islands.

White Bermuda matures in less than six months from the time of sowing, and we believe it to be a valuable early onion for our Coast growers. Try it.

Pkt., 5c; oz., 25c; $\frac{1}{4}$ lb., 75c; lb., \$2.60.

WE ARE large growers of Onion Seeds and Sets, and for years have been specializing on varieties that attain their greatest perfection in the Northwest and believe in our "**OREGON YELLOW DANVERS**" we have the finest type of Danver Onion ever offered, and recommend it to all commercial growers.

White "Bunching" Onion

This variety is especially useful to market gardeners for producing an attractive "green onion." The young stalks blanch to a beautiful clear white and are crisp and mild, attaining a good size before the bulb forms. Pkt., 5c; oz., 20c; $\frac{1}{4}$ lb., 50c; per lb., \$1.50.

Red Bermuda

Identical with the White except in color, which is a pale, translucent red. This is the ideal early onion wherever the red variety is preferred.

Pkt., 5c; oz., 25c; $\frac{1}{4}$ lb., 75c; lb., \$2.60.

Extra Early Red Flat

A medium-sized, flat variety; comes into use nearly two weeks earlier than the Large Red Wethersfield.

Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 40c; lb., \$1.25.

Prizetaker—The Genuine

The Handsomest and Largest Yellow Globe Onion.

Of fine flavor, handsome shape and enormous size. A perfect globe shape, with a bright straw-colored skin; the necks are very small and the onions always ripen up hard.

Pkt., 5c; oz., 20c; $\frac{1}{4}$ lb., 50c; lb., \$1.50.

ONIONS—Continued**Australian Brown**

This onion resembles the Oregon Yellow Danvers in general appearance, but has a clear, amber-brown skin that attracts buyers. It matures early, ripens uniformly, and will keep in good condition longer than any other onion. We offer the true seed, Oregon grown.

Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 35c; lb., \$1.00.

Yellow Globe Danvers

A very handsome, round or globe-shaped variety, of large size, with thin, yellowish skin, white flesh, fine grained, mild, very firm, and the best of keepers. It ripens early.

Pkt., 5c; oz., 20c; $\frac{1}{4}$ lb., 45c; lb., \$1.50.

White Portugal, or Silver Skin

Skin and flesh pure white; mild flavor and flat shape; grown largely for sets.

Pkt., 5c; oz., 20c; $\frac{1}{4}$ lb., 60c; lb., \$2.00.

Well-Known and Popular Onions

	Pkt.	Oz.	$\frac{1}{4}$ lb.	Lb.
YELLOW FLAT DANVERS. Largely planted. Flesh fine grained; mild; white; good keeper.....	5c	15c	40c	\$1.25
EXTRA EARLY BARLETTA. A small, pure white, mild onion; fine for pickles.....	5c	20c	55c	1.75
WHITE GLOBE. Flesh very white, fine, rich and sweet; fine keeper.....	5c	25c	65c	2.00
GIANT ROCCA. Large, globe-shaped; skin reddish-brown; flesh mild, sweet flavored.....	5c	20c	50c	1.75
MAMMOTH SILVER KING. Very large and attractive; skin white; flesh fine grained and mild.....	5c	20c	50c	1.75
QUEEN. If sown thickly, produces small, very firm bulbs, the best of all for pickling; if given more room, matures an excellent onion, that will keep all winter.....	5c	20c	55c	1.75

Onion Sets**Bottom Onion Sets.**

Small onions grown from seed that has been sown too thickly to attain a large size. The small onions (about $\frac{1}{2}$ inch in diameter) thus obtained are planted out and are ready in a short time to pull as green onions for the table or bunched for the market. If left to stand they make ripe onions of the best quality, and come to maturity some six weeks earlier than a crop grown directly from the seed.

Per lb., 25 c.

For Garlic see page 17.

Top Sets.

Produced in clusters.

Per lb., 25c.

Shallots.

Valuable for bunching or for an early crop. The smallest sets make fine bulbs of good size, while the larger ones produce a cluster of small to medium-sized bulbs. Light brown skin; mild, white flesh.

Per lb., 30c.

Bottom Multiplier

Potato onion sets.

Per lb., 30c.

Okra or Gumbo**Improved Dwarf Green.**

Very early, with long, green, slender pods.

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 60c.

White Velvet.

The pods are smooth or very slightly ribbed, large; remain tender a long time.

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 60c.

PARSNIPS

The Parsnip is nutritious and wholesome, with a sugary sweetness peculiar to itself, and is desirable both for the table and stock feeding. It yields a large crop, and is said to be more valuable for dairy cows than either the carrot or turnip. As the seed germinates very slowly, sow as early in spring as possible in drills fifteen inches apart on deeply cultivated, rich, loamy soil. Keep clear of weeds and thin to three or four inches apart. The roots are improved by freezing.

Hollow Crown or Long White Dutch

Root very long, white, smooth, tender, sugary, and of most excellent flavor. Very hardy; will keep through the winter without protection.

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 60c.

Guernsey. Half Long

Root white, very tender, with a smooth, clear skin. Shorter and thicker than "Hollow Crown" desirable for stiff soils.

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 60c.

 Use our No. 10 FERTILIZER for ONIONS. If on "Beaverdam" add a little Potash and Phosphoric Acid. Ask for our Fertilizer Booklet. Free.

**RED WETHERSFIELD****Large Red Wethersfield**

A standard variety, one of the most productive kinds, even in poor soil. Its good keeping qualities render it one of the best for shipping.

Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 40c; lb., \$1.25

"Diamond Quality"

 We pay postage on Peas in 10c. packets only. If ordering by mail in larger quantities, add 10c. per pound for postage.

GARDEN Peas are one of the most important crops and we have spared no effort to select and improve the best strains of the most profitable and satisfactory varieties. These selected strains grown under our direct supervision for many years will give you the biggest yield and the handsomest, sweetest, best flavored Peas for early market or home garden. The varieties offered have proved by growing tests to be the best of their kind and class.

Three Extra Early Peas

Unique

Our New Extra Early Dwarf Pea

Quality and sweetness unsurpassed; yields enormous; has largest and longest pods of any Extra Early Dwarf Pea, and they are filled clear to the ends with rich, fine flavored Peas, as sweet as sugar.

Vines are only eight to ten inches high, and peas are ready for table in sixty days from date of planting. Mature evenly, and are all gone in less than ten days—a very valuable point for market gardeners.

"Unique" is hardy, vigorous, and the best early dwarf garden Pea ever grown. We urge our customers to give it a trial.

Pkt., 15c; lb., 25c.

P. S. Co.'s New First Early

For fall or earliest spring planting. The first early round Pea with the sweet flavor of the wrinkled varieties.

"First Early" resembles "Alaska" in habit of growth, the height being 24 to 30 inches, without branching.

Pods are produced in great abundance, are very uniform, and contain six peas; mature very quickly and evenly, giving about three pickings, and for extreme earliness and productiveness far outclasses Alaska. "First Early" is the best early pea for fall planting, or for early succession. Our grower reports: "It fairly jumps out of the ground." Planted the same time as "American Wonder," was ready for table three weeks earlier.

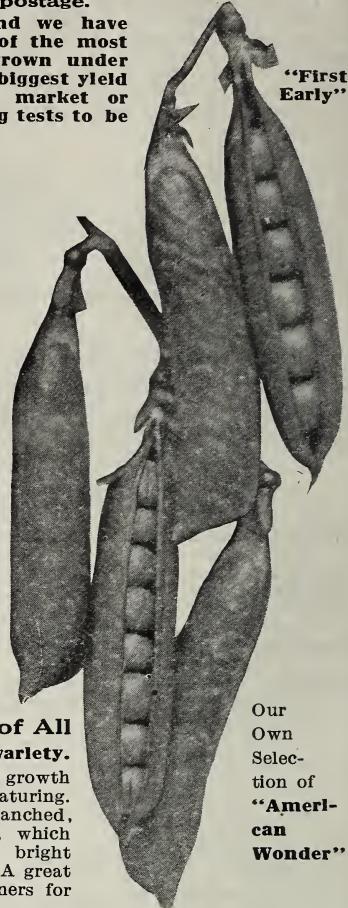
Pkt., 15c; lb., 25c.

Alaska or Earliest of All The standard extra early variety.

A smooth, blue pea, of even growth of the vine and extra early maturing. Vines two to three feet high, unbranched, bearing four to seven long pods, which are filled with medium-sized, bright green peas of excellent flavor. A great favorite with our market gardeners for fall and early spring planting.

Pkt., 10c; lb., 15c; 10 lbs., \$1.25

Our Own Selection of "American Wonder"



Early Garden Peas

Standard Varieties.

William Hurst

A splendid English variety of special merit, grows to a height of 18 inches is very early and bears the shapely, well-filled pods in great abundance. A vigorous grower and one of the very best Garden Peas for home or market use. Pkt. 10c; lb., 15c; 10 lbs., \$1.25.



Edward VII

The pods are well filled and as large as most late peas.

We introduced this grand variety from Europe and its popularity increases each season. Of all the Dwarf Early Peas King Edward VII produces the largest pods of the finest flavored peas in the greatest quantities.

Pods resemble Stratagem in color and size and are remarkably well filled with deliciously flavored peas. Height, 15 inches. Try this grand new pea and we are sure you will be more than pleased.

Pkt., 10c; lb., 15c; 10 lbs., \$1.25.

American Wonder

One of the most popular and best of the early wrinkled sorts. A great favorite for family use. Has stout, branching vines, covered with well-filled pods containing seven or eight large, exceedingly sweet, tender and well-flavored peas; height 10 to 12 inches.

Pkt., 10c; lb., 20c; 10 lbs., \$1.50.

WILLIAM HURST

PEAS—Continued

 We pay Postage on 10c Pkts. Only. If ordering by mail, add 10c lb. to Catalog Price.

Gradus

This extra early, wrinkled pea bears pods of large size, and combines quality with earliness. It is very hardy; can be planted fully as early as the smooth peas; growth, vigorous and healthy; vines 2 1/2 feet in height; very prolific. The quality and flavor are delicious, and the peas remain tender and sweet for a long time.

Pkt., 10c; lb., 20c; 10 lbs., \$1.75.

Nott's Excelsior

The most desirable sort for the market gardener, and unexcelled for the home garden. Very hardy. The pods contain from six to nine large peas, which are unusually fine flavored and tender.

Pkt., 10c; lb., 20c; 10 lbs., \$1.50.

Premium Gem

One of the earliest dwarf varieties, coming in a little later than the American Wonder; grows taller, much more productive and continues in bearing longer. The quality of the pea is very superior. Height, 15 inches.

Pkt., 10c; lb., 15c; 10 lbs., \$1.25.

Portland Seed Co.'s Magnificent

We like "Magnificent" better every year. It is just what the name implies, a magnificent pea. A robust grower, producing in astounding profusion large, handsome, deep green pods closely packed with luscious, tender sweet peas. A grand medium early pea for home and market garden; bears through a long season. Height, two feet. You will not be disappointed in this new variety.

Pkt., 10c; lb., 20c; 10 lbs., \$1.50.

LIKES "KING EDWARD"

Cascade Locks, Ore., Aug. 9, 1912.

Gentlemen: I have used your seeds this year for the first time and I must say they are the best I have ever used and I have tried seeds from all parts so you will always get my order from this on.

Edward the VII Peas are the best I have ever tried. I gave some to others to try them and they say they are the best they have ever eaten.

Yours truly, ALBERT E. KELLY.

"Pride of Multnomah" is the best main crop Potato. Try it

Main Crop Varieties

Improved Stratagem

One of the best of the large podded peas; the pods are of immense size, filled with large, dark green, wrinkled peas of the finest quality; vine of medium height, but very stocky, with very broad, light green leaves, and bearing an abundance of large handsome pods.

Pkt., 10c; lb., 15c; 10 lbs., \$1.25.

Improved Dwarf Telephone Our Own Select Strain.

Dwarf Telephone is the famous old Telephone without its long vines; of healthy, stocky growth; very productive; pods large, broad, straight and remarkably well filled with large, sweet peas of delicious flavor; very desirable. Eighteen to twenty inches high.

Pkt., 10c; lb., 20c; 10 lbs., \$1.85.

Yorkshire Hero

One of the largest, sweet, wrinkled kinds; vines strong and spreading; pods of good size and well filled; much in use, and has enjoyed a long popularity; medium late; bears a long time; height, 2 1/2 feet.

Pkt., 10c; lb., 15c; 10 lbs., \$1.25.

Telephone—Tall

A Great Favorite With Our Market Gardeners.

Immensely productive, of the finest quality and excellent, sugary flavor, vines strong; the pods are of large size, filled with large, luscious peas; height, four feet.

Pkt., 10c; lb., 20c; 10 lbs., \$1.50.

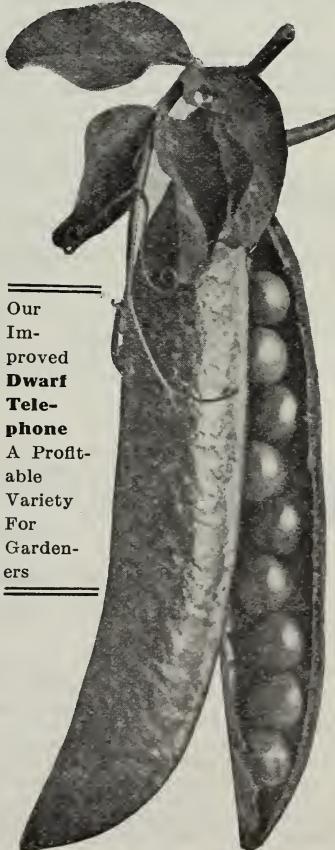
Sugar Peas---Edible Pods

These peas have broad, fleshy pods that are broken and cooked like string beans. They are sweet and tender and of a luscious flavor, served with butter sauce.

Dwarf Gray

Pods large, sweet and tender; vines dwarf; gray seeded,

Pkt., 10c; lb., 25c.



PUMPKINS

LARGE
YELLOW

WINTER
LUXURY



CULTURE.—Pumpkins will grow on any good farm land, but their size and quality will depend on the culture and fertility of the soil. Plant early in May, in hills six to eight feet apart. One pound of seed will plant about 300 hills. Care should be taken to keep the different varieties well apart, also away from other vining plants, as they mix and deteriorate very rapidly.

Winter Luxury.

The best flavored pie pumpkin grown; enormously productive; excellent keeper; medium size; color, golden-russet, finely netted; flesh, deep golden, sweet, tender and very thick; none better.

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 20c; lb., 65c.

Sweet, or Sugar.

A handsome and productive small pumpkin, ten to twelve inches in diameter; round flattened; skin, orange; flesh, deep yellow, fine grained and very sweet.

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 20c; lb., 60c.

Tennessee Sweet Potato.

Pear shaped; flesh thick, cream white, fine grained and of excellent flavor.

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 75c.

Large Yellow, or Connecticut Field.

Large round; deep, glossy yellow. Vines vigorous and very productive; good keeper. Grown extensively for stock feeding.

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 20c; lb., 50c.

Giant of All

A New Improved Variety and a Giant Among Mammoths.

This colossal Pumpkin is almost a globe in shape. The skin is of a beautiful, rich golden yellow; flesh firm, fine grained and deep yellow, sweet flavored, very thick and of excellent quality for so mammoth a variety. These Pumpkins attain an enormous size and will carry away prizes at your county fairs.

Large Pkt., 15c; oz., 20c; $\frac{1}{4}$ lb., 50c., lb., \$1.50

Mammoth Tours.

A productive French variety; grows to an enormous size.

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 75c.

Large Sweet Cheese

A popular variety. Fruit flattened; skin, mottled light green and yellow. Flesh, yellow, thick, tender; very nutritious and of excellent quality; a most productive variety.

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 20c; lb., 60c.

Pepper

Sow the seeds early in hotbeds; or later, when the weather becomes warm, in open beds. When two or three inches high, transplant to a warm, mellow soil, in rows eighteen inches apart and a foot apart in the rows. Guano and hen manure are excellent fertilizers and will greatly increase the yield.

NEW NOCERA--A Giant Red Pepper of largest size; mild and very fleshy a favorite English variety.

Pkt., 5c; oz., 35c; $\frac{1}{4}$ lb., \$1.00

NEW CHINESE GIANT SWEET--The largest and best of the mild Red Peppers. The fruits are four to five inches in diameter, borne in clusters on the thick stocky bushes that are well branched, and grow about two feet high; color, brilliant, deep red; vigorous and about as early as Ruby King.

Pkt., 10c; $\frac{1}{2}$ oz., 25c; oz., 40c; $\frac{1}{4}$ lb., \$1.25.

RUBY KING. Very large, sweet and mild; bright scarlet.....5c 25c 75c

LARGE BELL or BULL NOSE. Large, mild, thick fleshed

variety. One of the best for stuffed pickles.....5c 25c 75c

GOLDEN DAWN. Bright, golden yellow; very productive;

entirely free from fiery flavor.....5c 25c 75c

SWEET SPANISH or MOUNTAIN. Of the largest size, bright

scarlet. Excellent for pickling and stuffing.....5c 25c 75c

CAYENNE. Pods long; bright red; very pungent and used very

largely with pickles when green.....5c 25c 75c

CHILI. Pods small and pointed; brilliant scarlet; very pungent

when ripe.....5c 25c 75c



Parsley

Very useful for flavoring soups, meats and for garnishing. The green leaves are used for flavoring or they may be dried crisp, rubbed to a powder and kept in bottles until needed.

Fine Triple-Curled, or Myatt's Garnishing.

A fine, free growing, but not large variety. The plants bear a great number of leaves, which are so abundant and so finely curled that they resemble a bunch of moss.

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 20c; lb., 60c.

Turnip-Rooted, or Hamburg.

The root, which resembles a small turnip, is the edible portion of this variety. Extensively grown and used for flavoring soups, etc.

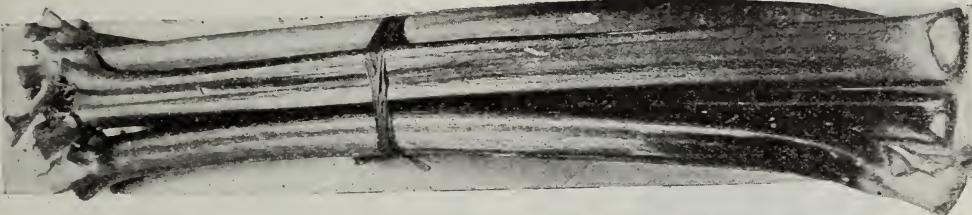
Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 20c; lb., 60c.

Champion Moss Curled.

A compact growing, finely cut and much curled variety of a bright green color.

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 20c; lb., 60c.

Rhubarb or Pie Plant



CULTURE.—Rhubarb succeeds best in deep, rich, somewhat retentive soil. The richer its condition and the deeper it is stirred the better. Sow in drills an inch deep and thin out the plants to six inches apart. In the fall transplant the young plants into very highly manured and deeply stirred soil, setting them four to six feet apart each way, and give a dressing of coarse manure each spring. The stalks should not be plucked until the second year and the plant never allowed to exhaust itself by running to seed.

Victoria, or Mammoth

Very large; finest cooking variety.

Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 45c.; lb., \$1.50. A large early variety, very tender and of fine flavor. Pkt., 5c.; oz.; $\frac{1}{4}$ lb., 45c.; lb., \$1.50.

Rhubarb Roots.—From October to June we can always supply one or two-year old Rhubarb Roots. Customers wanting only a few dozen roots for home gardens will save much valuable time by ordering roots instead of seed. For prices, see Plant Department.

Giant Linnaeus

This is an important gardener's crop, of easy culture. For spring and summer use, sow either broadcast or in drills one foot apart and one inch deep, as early as the ground can be worked, and every two weeks for a succession.

Prices are Uniform on All Varieties Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 20c; lb., 40c.

Improved Thick Leaved.

Variety which grows very rapidly, forming a cluster of large, very thick, slightly savoyed leaves of fine color, and quality when cooked. Best for market gardeners.

Savoy Leaved. Very early; of upright growth; leaves pointed. Plant in the autumn for spring use; grows quickly.

Victoria. Leaves large, tender and of good quality; good market sort.

Prickly Winter. Hardest variety; may be sown in the fall; seed prickly; leaves long, pointed, thick and succulent.

Long Standing. An improved variety for general use; slow going to seed.

Gardeners get special prices; state amount wanted

SALSIFY OR VEGETABLE OYSTER

SALSIFY is a nutritious and wholesome vegetable, having the appearance of a small parsnip; in flavor closely resembling oysters, for which it is, in that respect, a good substitute. It is rapidly coming into more general use. Sow early in spring, in drills a foot apart, and when two or three inches high thin out to three or four inches. Its general culture is the same as that recommended for carrots. The roots are perfectly hardy and may remain in the ground during winter, or may be stored in dry earth or sand.

Mammoth Sandwich Island. The leading variety; produces a large crop of straight smooth roots.

Pkt., 5c; oz., 15c.; $\frac{1}{4}$ lb., 40c.; lb., \$1.35.

RADISHES

To secure Radishes with crisp, tender flesh, grow them quickly in rich, loose soil, and gather before reaching full size. Our Radish Seed is strictly of the finest grade, being grown from carefully selected roots. Frequent planting should be made for succession, so that a supply of fresh, tender Radishes in the finest condition may be had at all times.



CRIMSON
GIANT

White Icicle

This superb new Radish is the finest and longest of the very early, pure white varieties. Planted in the spring, is ready for use in twenty to twenty-five days; their long, slender form and pure, paper-white skin are most attractive when bunched for market. This Radish is not only crisp and tender when young, but also retains these qualities until the roots attain large size; is excellently adapted for forcing purposes or successive sowing in the open ground and gives a continuous supply of tender, crisp Radishes for the table or market throughout the season.

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 20c; Ib., 65c.

Winter Radishes

California Mammoth White China.

This is the largest of all radishes. Roots grow ten to twelve inches long and are solid, tender and crisp. Keeps well through winter.

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; Ib., 75c.

China Rose Winter.

One of the best fall and winter varieties; a favorite with market gardeners; bright rose color; flesh white, firm and of superior quality.

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; Ib., 75c.

BLACK SPANISH LONG—Standard winter sort, has good flavor, and keeps well.

Price: Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; Ib., 75c.

BLACK SPANISH ROUND—Same as long, except shape.

Price: Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; Ib., 75c.

Early Crimson Giant. The Largest Early Scarlet Turnip-Shaped Radish.

A new, early Radish, double the size of any of the turnip-shaped type, but, notwithstanding its immense size, does not get hollow and pithy. The flesh is a sparkling white, solid, crisp, juicy and of the mildest flavor. The shape of the bulb varies from round to almost oval, but the bright deep crimson color of the skin remains quite constant. Excellent for both forcing and open ground.

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; Ib., 75c

Early Scarlet Turnip

A small, round, red turnip-shaped Radish, with small top and of very quick growth; very early; rich color and crisp, tender flesh.

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 20c; Ib., 60c.

Cincinnati Market

A superior strain of long scarlet, an early rapid grower of a deep crimson color so clear and brittle as to be almost transparent. Keeps fresh and stands shipment—a fine market radish.

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; Ib., 75c.

French Breakfast, or Half Long.

Medium size, quick growth, crisp and tender; lower end and taproot white.

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 20c; Ib., 60c.

Early Scarlet Turnip, White Tipped

A beautiful variety, deep scarlet with white tip. Very early. Has a small top, and may be planted closely. Flesh crisp, tender and sweet. Cannot fail to give satisfaction as a forcing Radish.

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 20c; Ib., 60c.

Early Long Scarlet, Short Top.

This bright scarlet, small topped sort is uniformly straight, smooth, brittle and crisp, and is a standard and excellent sort for private gardens or market use.

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 20c; Ib., 60c.

Long Brightest Scarlet, White Tipped

This is the brightest and handsomest colored Scarlet Radish known. The lower third of the root is snow white; very attractive. It is extra early and the flesh is very tender. Valuable for forcing or open ground.

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 20c; Ib., 60c;

Improved Chartier.

Roots long, tapering, and attaining a very large size. Of rapid growth; remains crisp and tender till fully grown. Color, scarlet above, shading into white at the tip. Flesh white and mild flavored.

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 20c; Ib., 60c.

Early Snowball.

A grand improvement on the White Box or White Turnip Radish which has been so popular for several years. It is handsome in shape, very early, and has but few leaves, is of a clear white color, solid, juicy, crisp, tender and unsurpassed in flavor. A good sort for forcing.

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; Ib., 75c.

Lady Finger, or White Vienna

Of rapid growth and beautiful shape. Skin and flesh snow-white; very juicy, firm, crisp and tender; the finest of Long White Radishes.

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 20c; Ib., 65c.

White Strasburg.

One of the best large summer sorts. It covers a long season, as it is good when quite small. The roots are long, very white, crisp and tender.

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 20c; Ib., 65c.

"Diamond Quality" SQUASH

CULTURE.—The plants are very tender and sensitive to cold, and planting must be delayed until settled warm weather. The general principles of culture are the same as those given for cucumbers and melons, but squash is less particular as to soil. The summer varieties should be planted four to six feet apart each way, and the winter sorts eight to ten feet. Three plants are sufficient to a hill.



GARDENING for
PROFIT
Henderson
376 pages
\$1.75 Postpaid

Summer Varieties

Mammoth White Bush Scallop.

The best summer sort for the market; very productive and of good size.

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 75c.

Early Yellow Mammoth Bush Scallop

An early, flat, scallop-shaped variety; color yellow; flesh pale yellow and well flavored; very productive. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 75c.

Mammoth Summer Crookneck.

Early, prolific, solid, curved neck; skin yellow, thin, hard and warty; flesh tender and of good quality. Twice as large as the ordinary Crookneck and several days earlier.

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 80c.

Winter Varieties

Mexican Banana Squash

This rare Squash is the sweetest, richest Squash you have ever eaten, has fine grained, bright orange flesh, outside color bluish gray with orange markings as they mature. The seed cavity is small, making them almost solid. Their length is from one and one half to two feet, diameter six to eight inches. They excel in yield, uniformity, keeping qualities and attractiveness and we recommend them as the finest table Squash to date. **Be sure to plant Mexican Banana.**

Packet, 10c; oz., 20c; $\frac{1}{4}$ lb., 50c.

True Hubbard.

The best seller and most popular variety on our list. Rind dark green, warty and very hard. Flesh light orange, very dry, sweet and rich flavored. Has no superior. Keeps perfectly through the winter.

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; lb., \$1.00.

New Delicious.

This new fall and winter squash resembles the old Hubbard; average weight is between five and ten pounds. Seed cavity small; flesh exceedingly thick, compact, fine grained; color, golden orange. The flesh is meaty, granulated, tender and almost of mealy dryness, cooking sweet and rich, whether steamed, baked, boiled or made into pies.

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; 1 lb., \$1.00.

Boston Marrow.

Skin yellowish, very thin; flesh dry and fine grained; of unsurpassed flavor.

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 20c; lb., 65c.

Sibley, or Pike's Peak.

Shell smooth, thin and of a pale green color; the flesh is thick, solid, deep orange color; very dry, fine grained and delicate flavor.

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; lb., 90c.

Winter Varieties

Golden Hubbard

The same in size, shape and quality as the well-known Hubbard Squash, except that it is a bright red or golden color, and somewhat earlier. It is also a long keeper. One of the very best fall and winter sorts yet introduced. **Maturing before the frosts; is vigorous and wonderfully productive. In flavor it has no equal.**

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 90c.

Mammoth Chili.

The largest of all Squashes, growing to an enormous size, often weighing over 200 pounds, while its rich, fine flavored flesh insures its value for all purposes. Its size makes it valuable for stock feeding.

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c., lb., 90c.

A
Profitable
Squash for
market
gardeners
90 per cent
Salable.



NEW
DELICIOUS

TOMATOES

THE newer types of hardy, prolific Tomatoes are better adapted to the cool coast climate than the older sorts; and splendid crops are now being grown where heretofore it was thought Tomatoes would not thrive. A good plan is to try several varieties and find which is best suited to your special conditions.

CULTURE.—Sow early in hotbeds, and as soon as they have four leaves transplant in shallow boxes. Harden off, and set out as soon as danger of frost is past. An ounce of seed will produce 3,000 to 4,000 plants.

Chalk's Early Jewel

Large bright red, smooth round fruits, very deep and colored evenly up to the stem; very solid, almost seedless and of the finest flavor.

Vines are vigorous, not subject to blight, and yield fully equal to, or better than, Earliana.

We recommend Chalk's Early Jewel as the very best early Tomato for either market or home gardens.

Pkt., 10c; oz., 25c; $\frac{1}{4}$ lb., 85c.

Livingston Globe

Finest of the early purple Tomatoes.

Hardy and blight proof.

Fruits are of large, even size; very early; ripen clear through and are always smooth, firm and round; with solid meat and few seeds. Color is a beautiful glossy, rose-tinged purple; very productive. Livingston's Globe is of delicious table quality and will keep longer than any other Tomato.

Pkt., 10c; oz., 40c; $\frac{1}{4}$ lb., \$1.00.

Livingston's New Coreless.

The most perfect shaped canning variety ever produced. Large size, globe shaped, full at stem end, bright red, a strong grower and big cropper.

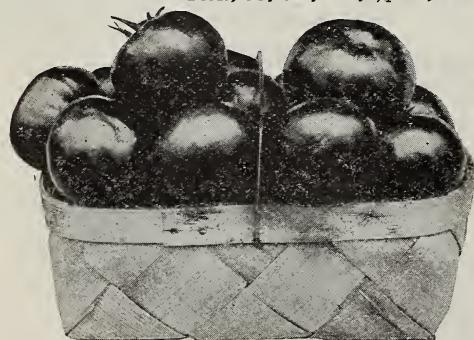
It is immensely productive, clusters of four to seven fruits are produced at six to eight inches apart along the stem. All of the fruits are of marketable size, and many of them are quite large, twelve to fifteen ounces. Always free from green core; ripens all over and through and right up under the stem, all at once. A grand, good slicing variety; the seed cells being surrounded by bright red, heavy, meaty and delicious flesh, which is slightly acid.

Pkt., 10c; oz., 40c; $\frac{1}{4}$ lb., \$1.25.

New Stone.

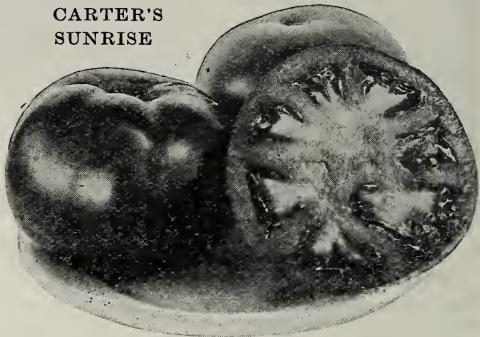
This variety has obtained great popularity with canners, growers and market gardeners everywhere. Its solidity and carrying qualities are remarkable. Its color a desirable red. In shape, perfectly smooth and thicker from stem to blossom end than most varieties, making it very handsome and safeable. All speak in highest terms of its beautiful color, its wonderful yielding properties, its unequalled firmness.

Pkt., 5c; oz., 20c; $\frac{1}{4}$ lb., 65c.



NEW STONE

CARTER'S
SUNRISE



New—Carter's Sunrise

A very early English variety of fine flavor and healthy, vigorous growth with solid flesh and few seeds; very even, smooth and shapely. Color, bright rich scarlet. Is also one of the best forcing varieties.

Pkt., 25c.

Spark's Earliana.

The Earliest Tomato.

Of large, uniform size and beautiful red color. Quality almost beyond praise. Ripens thoroughly all over, the stem end coloring up perfectly. Almost seedless and very solid. A most vigorous grower and heavy bearer, continuing until frost. Succeeds everywhere, and especially recommended for this Coast.

Spark's Earliana is as near seedless as any tomato, giving but 12 to 15 pounds of seed to the acre. For this reason the genuine seed can never be sold at a low price.

Pkt., 10c; oz., 25c; $\frac{1}{4}$ lb., 75c.

Comet—Forcing.

The very best forcing variety and a general favorite with greenhouse growers. Color is a beautiful scarlet; fruits are of good size, very smooth and uniform. We offer a select strain from inside stock.

Pkt., 25c.

Fordhook First.

A splendid variety, especially adapted for cool, moist or heavy soils. Plants of strong, running growth; fruit, three inches in diameter, perfectly smooth and free from cracks; quite thick through and richly colored deep purple. Very fleshy and of the finest flavor. Produces smooth, solid, handsome fruit of superior quality, earlier than most other earlier sorts.

Pkt., 5c; oz., 25c; $\frac{1}{4}$ lb., 75c.

Ponderosa

The largest tomato, fruits are solid and of a purplish red color, sweet and of good quality.

Pkt., 10c.; oz., 40c. $\frac{1}{4}$ lb., \$1.00; lb., \$3.50

Tomato Plants

We have, in season, strong, hardy plants of all standard varieties. For prices, see Plant Department.

TOMATOES—Continued

Atlantic Prize.

In point of earliness, this undoubtedly takes the lead. In size, shape and color it compares favorably with later sorts. Color, bright red.

Pkt., 5c; oz., 20c; $\frac{1}{4}$ lb., 70c.

Quarter Century.

A grand, new, dwarf tomato. The fruit is large and heavy and superior in flavor; color, deep red. Fine for home or garden.

Pkt., 5c; oz., 30c; $\frac{1}{4}$ lb., \$1.00.

Well Known Standard Varieties.

ACME. The well known, standard, bright pink Tomato....

Pkt. Oz. $\frac{1}{4}$ lb.
5c 25c \$0.60

DWARF CHAMPION. Dwarf, upright growth; smooth, purple fruit.....

5c 25c .75

GOLDEN QUEFN. This is a first-class, large, smooth, pure yellow tomato.....

5c 25c .75

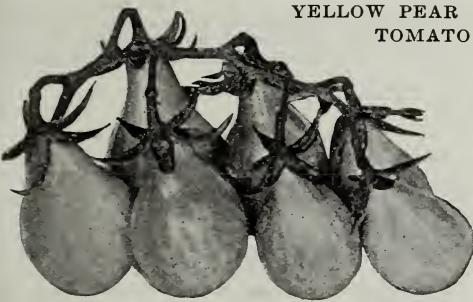
LIVINGSTON'S BEAUTY. Large; good quality; deep red in color.....

5c 25c .65

LIVINGSTON'S FAVORITE. Excellent for general crop; bears heavily.....

5c 25c .70

YELLOW PEAR
TOMATO



Yellow Pear.

A small pear-shaped tomato, borne in great profusion, vine literally covered with large clusters of fine, solid fruits; excellent for preserving, and for use in salads and cooking is superior, as flesh is not watery. Very hardy. To this class belong **Yellow Plum** and **Red Cherry**. All same price

Pkt., 5c; oz., 25c; $\frac{1}{4}$ lb., 75c.

FERTILIZERS

Are not an expense. They are a safe investment, sure to return many times their cost.

Our Fertilizer Book and the Books of the German Kali Works Free on request.



GROUND
CHERRY
or
HUSK
TOMATO

Ground Cherry, or Husk Tomato.

Grows to great perfection under ordinary culture, yielding abundantly; very much prized for preserving; should be in every garden.

Pkt., 5c; oz., 30c; $\frac{1}{4}$ lb., \$1.00.

Tomato Culture Littooy Post Paid 25c.

Tobacco

Sow the seed thinly in beds, as early as they can be well prepared. Cultivate thoroughly, transplanting when six inches high to rows four feet apart each way.

Connecticut Seed Leaf.

Hardy, and the best adapted to cool localities, and for general use.

Pkt., 5c.; oz., 20c; 2 oz., 35c; $\frac{1}{4}$ lb. 60c; lb., \$2.00

Havana.

Of fine texture and delicate flavor.

Pkt., 5c; oz., 25c; $\frac{1}{4}$ lb., 75c.

Tree Seed

NURSERYMEN:

We offer only fresh, new crop seeds. Growers wanting large quantities should give us their orders early. Prices quoted on request. Single pound prices are by mail, postpaid.

Apple Seed.

French Crab Oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 75c.

Pear Seed.

French. Oz., 15c; $\frac{1}{4}$ lb., 50c; lb., \$1.75.

Cherry Pits.

Mazzard $\frac{1}{4}$ lb., 20c; 1 lb., 70c.

Japanese. The best imported for nursery stocks. Oz., 30c; $\frac{1}{4}$ lb., 80c; lb., \$2.60.

Mahaleb

Oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 80c.

Walnut, English—Imported.

Peach Pits.

For nursery stock Lb., 20c; 100 lbs., \$2.25.

We offer new crop, our own direct importation from the best French growers. In the three most desirable varieties: **Mayette**, **Franquette**, and **Praeparturian**.

Quince Seed.

Oz., 20c; $\frac{1}{4}$ lb., 60c; lb., \$2.10.

Write for prices on large orders.

Locust.

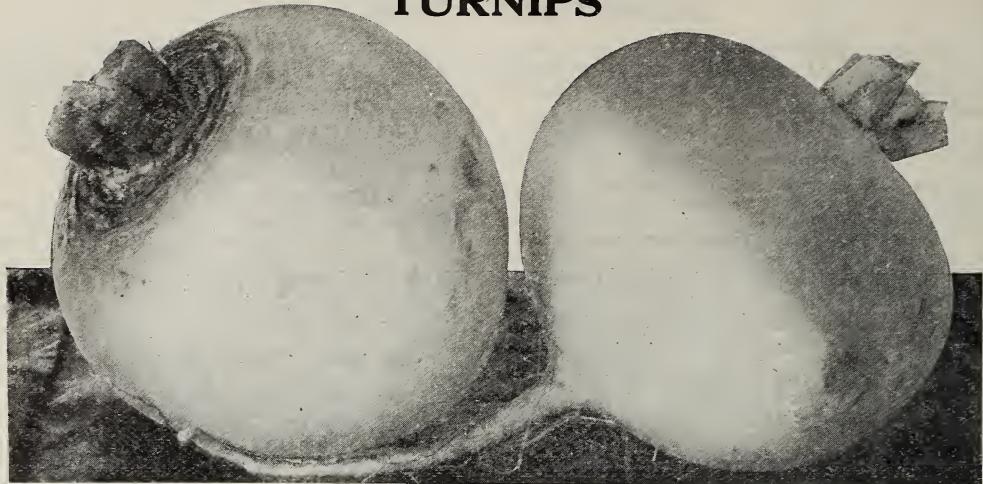
Oz., 10c; $\frac{1}{4}$ lb., 60c.

2c each; \$1.50 per 100 nuts.

Yellow or Black Oz., 10c; $\frac{1}{4}$ lb., 20c; lb., 60c.

Honey Oz., 10c; $\frac{1}{4}$ lb., 25c.

"DIAMOND QUALITY" NURSERY STOCKS are vigorous, healthy and true to name. Ask for our 64-page Catalog.

TURNIPS**PURPLE TOP WHITE GLOBE**

FOR early use sow the small sorts as soon as the ground can be worked in the spring, in drills fourteen inches apart. As the seed is very fine, it should be covered but slightly, except in very dry weather. For fall and winter use, sow the early kinds during July, August and September.

Early Garden Turnips**Early Purple Top Milan.**

This variety is ready for the table sooner after planting than any other yet introduced. Top small, erect, strap-leaved; bulb a deep purple above, white underneath; flesh white, firm and delicate.

Pkt., 5c; oz., 10c; ¼ lb., 30c; lb., 90c.

Early White Milan.

Same as Purple Top Milan, but pure white, sweet and tender; best early market variety.

Pkt., 5c; oz., 10c; ¼ lb., 30c; lb., 90c.

Early White Flat Dutch.

One of the very best and most universally grown. Small, erect top, round flat; flesh white, firm, but very tender and sweet. Of quick growth, it is soon ready for the table and keeps well.

Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 60c.

Main Crop Turnips**Danish Bortfelder**

This is a superior Danish variety introduced as an improvement on Cow Horn, being a heavier yielder and growing straight. It is also sweet and fine-grained, being a good table Turnip. Shape is long and tapering, but grows well up out of the ground. Sow in spring for summer, and in mid-summer for winter feeding.

Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 85c.

White Egg.

Is perfectly smooth, of a pure, clear white, growing half out of the ground, and at times to the size of a Ruta Baga, being a very choice kind for table use; of excellent flavor, sweet and mild. Pulls clean from the ground; thin, snow-white skin.

Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 65c.

Pomeranian White Globe.

One of the most productive kinds, and in good rich soil roots will frequently grow to 12 pounds in weight. It is of perfect globe shape; skin white and smooth; leaves dark green and of strong growth.

Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 65c.

Purple Top Strap Leaf.

A leading white-fleshed variety, and one of the best, either for the family, market garden or field crop. It is medium size, and produces a large crop. The flesh is firm, but tender, and of a superior rich buttery flavor. A good keeper.

Pkt., 5c; oz., 10c; 2 oz., 15c; ¼ lb., 20c; lb., 60c.

Early Snowball.

Early round turnip, maturing in seven weeks, is of perfect form, snowy whiteness, crisp, solid and of fine flavor.

Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 60c.

Orange Jelly.**Or Robertson's Golden Ball.**

Undoubtedly one of the most delicate and sweetest yellow-fleshed turnips yet introduced. Not of large size, but firm, hard and most excellent flavor. Keeps well and is superior as a table variety. It is extensively used by market gardeners.

Pkt. 5c; oz., 10c; ¼ lb., 25c; lb., 75c.

Purple Top White Globe.

A large, globe-shaped variety; purple above the ground. It is handsome and of excellent quality, and recommended both for the family garden and field crop. (See cut.)

Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 65c.

Large White Norfolk.

A white variety, usually attaining a very large size. Extensively grown for stock feeding. The leaves are also used for greens. It is hardy and may remain in the ground all winter. Yields very large crop.

Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 60c.

Cowhorn.

Sometimes called Long White. Slightly crooked. Pure white except a little shade of green at the top. Grows half out of the ground and is of very rapid growth. Is delicate and well flavored. Has proved itself one of the best stock turnips ever introduced in Oregon, as it is an immense yielder.

Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 75c.

Yellow Aberdeen.

Round, medium size; light yellow. Produces a large crop; is hardy and keeps well; flesh very firm, but tender and sweet. A great favorite with the dairymen.

Pkt., 5c; oz., 10c; 2 oz., 15c; ¼ lb., 20c; lb., 60c.

TURNIPS—Continued

Ruta Baga or Swede

FOR feeding stock in fall and winter there is nothing superior to Turnips or Ruta Bagas, as they are much liked by all kinds of stock and serve to keep them in good condition. We can not too earnestly recommend farmers to increase their sowings largely, for we are sure the crop will prove remunerative.

Bangholm Pajbjerg Improved Danish Purple Top

This variety was awarded a first-class certificate by the Danish government for heaviest yield, having given 49 tons per acre. In shape is a little more elongated than the Globe types. This variety is recommended as the best of its class.

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 75c.

Monarch or Tankard.

This is a yellow fleshed sort, having very large, tankard-shaped roots; flesh very solid, fine grained, of fine flavor; grows well out of the ground and yields large crops.

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 20c; lb., 60.

Skirving's.

Enormously productive; flesh yellow, solid and sweet. One of the best for field culture.

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 20c; lb., 60c.

White Sweet Russian.

This variety is most excellent, either for table or stock. It grows to a very large size; flesh white, solid, of a firm texture, sweet and rich; an excellent keeper.

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 20c; lb., 60c.

Improved American Purple Top.

The leading standard variety, being very distinct in type, attaining a wonderfully large size; immense yielder. The flesh is very firm, superior in every way, valuable alike for all purposes.

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 20c; lb., 60c.

Herb Seeds

Pot, Sweet and Medicinal.

HERBS in general delight in rich, mellow soil. Those marked with an (*) are perennial, and when once obtained in the garden may, with a little attention, be preserved for years. Sow the seeds early in the spring in shallow drills, one foot apart. We offer some of the most useful and popular. They should be cut on a dry day, just before they come into full bloom, and tied in bunches and hung up or spread thinly on a floor where they can dry quickly. Prices include postage.

All the Following Herbs, 5c per Packet.

	oz.	lb.	oz.	lb.	oz.	lb.
Anise.	Seeds aromatic.....	10c.	$\frac{1}{4}$ lb.	25c.	15c.	$\frac{1}{4}$ lb.
*Balm.	For culinary purposes....	25c.	65c.	15c.	50c.	
Basil—Sweet	15c.	45c.				
Borage.	Leaves for flavoring.....	15c.	40c.	15c.	50c.	
Caraway.	For flavoring.....	10c.	25c.	10c.	35c.	
Catnip. (Cat Mint).....	40c.	\$1.00				
Coriander. (Aromatic).....	15c.	25c.				
Dill.	Used medicinally.....	10c.	25c.	15c.	45c.	
*Fennel. (Sweet)	10c.	25c.				
Fenugreek.	For flavoring.....	10c.		10c.	35c.	
*Horehound.	Bitter, for tonic.....	20c.		30c.		
Hyssop.	Medicinal qualities.....	25c.	75c.	25c.	75c.	

Herb Seeds For Flavoring

Anise.

Anise seed for flavoring.
 $\frac{1}{4}$ lb., 15c; lb., 50c.

Coriander.

Coriander seed for flavoring.
 $\frac{1}{4}$ lb., 15c; lb., 30c; 100 lbs., market price.

Poppy

Seed used for flavoring. $\frac{1}{4}$ lb., 15c. lb., 30c;

Celery.

For flavoring. Oz., 10c; $\frac{1}{4}$ lb., 15c; lb., 50c.



Your
Separator
should be a
SHARPLES

Has
Produced
49 Tons
per Acre

Caraway.

We keep constantly on hand a large stock of well preserved seed for the use of Druggists, Bakers and Confectioners.

$\frac{1}{4}$ lb., 10c; lb., 30c; 100 lbs., market price.

Dill.

Used to flavor soups, stews and pickles. The leaves possess similar qualities, and can be used in the same manner as the seeds.

$\frac{1}{4}$ lb., 20c; lb., 55c;

Mustard.

For flavoring and pickling.
Lb., 15; postpaid, 25c; 100 lbs., market price.

**"Diamond
Quality**

SEED POTATOES

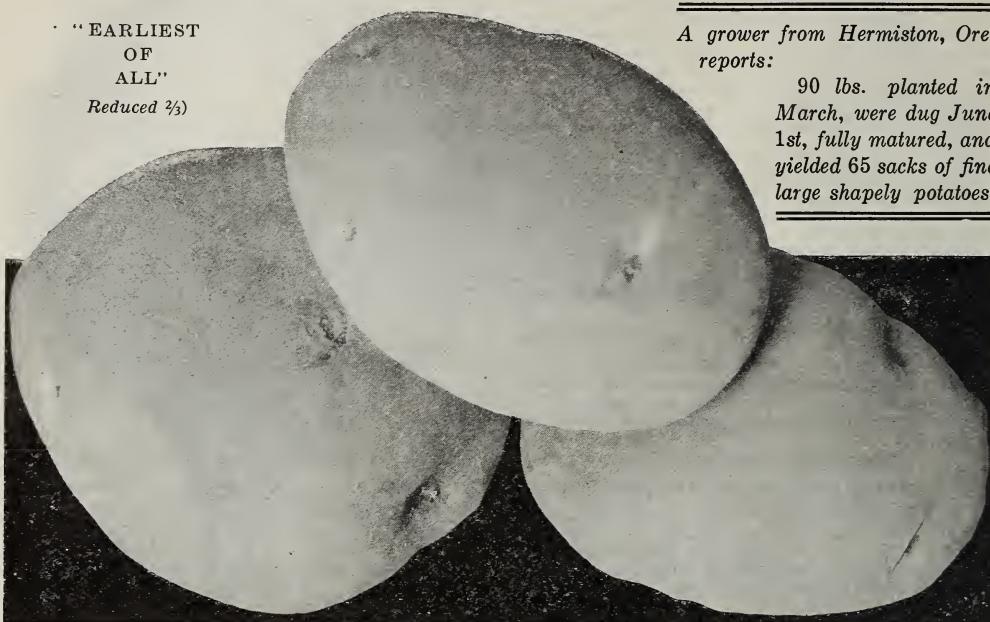
**True Type
Market Size**

IT will pay you to grow our select strains of Seed Potatoes for the Northwest, they have been carefully bred up by experts who have made a life study of Potato growing, and their care and patient effort has resulted in establishing fixed strains of almost perfect types that cannot be duplicated elsewhere. We offer a complete assortment of splendid varieties suitable for all soils and conditions under which Potatoes can be grown and the past season has again proved the superiority of the varieties and seed stock that we grow and offer and while "blight" has been so disastrous to many growers, our own seed crop is the largest we have ever harvested and the quality is unsurpassed.

"EARLIEST
OF
ALL"
Reduced 2/3

*A grower from Hermiston, Ore.
reports:*

90 lbs. planted in
March, were dug June
1st, fully matured, and
yielded 65 sacks of fine
large shapely potatoes



P. S. Co.'s Earliest of All—Blight Proof

The Best Potato for Dry Farming

We have yet to find an early potato that can compare with our "**Earliest of All.**" Its quick growth and early maturity give the ground for July planting and a **second crop can be grown the same season.** Summer drought does not affect it, for its growth is complete before it can be injured. Planted early is ideal for "Dry Farming."

One customer reports them ready for baking June 1, nine weeks from planting, and fully matured in 12 weeks.

"**Earliest of All**" is a healthy, vigorous grower not subject to blight or disease and does not make a second growth. Keeps as well as any late potato.

A handsome, shallow eyed, white-skinned potato of the finest table quality.

Price, 1 doz., eyes, postpaid, 30c; 4 lbs. whole potatoes, 80c; by Freight or Express, per pk., \$75c; ½ bu., \$1.25; bu., \$2.00; 100 lbs., \$3.00.

Early Freeman

A vigorous, productive, early potato of oval shape with russet skin, fine grained, white and floury. Not quite as early as "**Earliest of All,**" but much earlier and a far better yielder than any other early variety. Tubers shapely and uniform, with very few small ones. We specially recommend **Early Freeman as a potato of real merit. Try it.**

Price, mail, 1 doz. eyes, 30c; 4 lbs. whole potatoes, 80c; postpaid. Frt. or Exp., pk., 75c; ½ bu., \$1.25; bu., \$2.00; 100 lbs., \$3.00.

Early Sunrise

The best early pink variety—earlier than Rose, about the same depth of color, not so flat but a smoother, Potato, a bit more slender than Rose Sunrise is hardy, blight proof, and the best yielder of its type.

Price, postpaid, 4 lbs. whole potatoes, 80c; Frt. or Exp., peck, 75c; ½ bu., \$1.00; bu., \$1.75; 100 lbs., \$2.50.

Early White Prizetaker

A handsome early white Potato, one of the finest of all early sorts, being oblong in form, 4 or 5 inches in length, with white, smooth skin and few eyes. It is a very superior cooking potato either baked or boiled, cooking up dry and floury.

White Prizetaker has important advantages over other early Potatoes as its white skin, large size and good keeping qualities make it an ideal main crop variety, that sells at the best price. We always advise early planting, as the crop will be larger and better.

Price, postpaid, 4 lbs. whole potatoes, 80c; Frt. or Exp., peck, 75c; ½ bu., \$1.00; bu., \$1.75; 100 lbs., \$2.50.

Early Rose

Our stock of this popular variety is a special improved strain of our own growing; is very vigorous and extremely early.

Price, postpaid, 4 lbs. whole potatoes, 80c; Frt. or Exp., peck, 75c; ½ bu., \$1.00; bu., \$1.50; 100 lbs., \$2.00.



Formaldehyde Prevents Potato Scab—See page 37

POTATOES—Continued

OUR SEED STOCK
is grown by the originator who does not allow
any other Potato in his
fields,
and
to
be
sure
of
having
the
Genuine
Pride of Multnomah
always buy direct
from our Portland
Store

PRIDE OF
MULTNOMAHBest
Main
Crop
Potato**PRIDE OF MULTNOMAH**

Pride of Multnomah has withstood every test imposed upon it in different sections of the country and has more than proved our claim that it is the best main crop potato, and excels in yield, uniformity and table quality, being fine grained, of snowy whiteness, and for baking or boiling has no equal. The skin is smooth and white, eyes shallow, shape distinctive.

We believe **Pride of Multnomah** is blight and disease proof, and we know it to be drouth resistant to a remarkable degree, having a mass of fine fibrous roots that retain the moisture, and promote a vigorous growth.

Pride of Multnomah is the best keeping potato ever known, and should be planted early to insure perfect maturity and finest quality.

Order now and have your potatoes when you are ready to plant. We have never had enough to fill all orders. Don't you be the one that is disappointed.

Price, postpaid, 1 doz. eyes, 30c; 4 lbs. Whole potatoes, 80c; Freight or Express, 1 pk., 75c; $\frac{1}{2}$ bu., \$1.25; bu., \$2.00; 100 lbs., \$3.00.

New—Snow Potato

A splendid early maturing main crop Potato that gives a good yield on poor or light soil.

This fine potato, originating in Maine—a state famous for the quality of its potatoes—has proved a wonderful producer on poor soils where other varieties would not thrive.

Given good soil and culture "**Snow**" produces enormous crops of fine large oval tubers slightly flattened having shallow eyes and a netted skin. "**Snow**" is fine grained, flaky and of excellent quality. The luxuriant vines are dark green. The potatoes grow close together with very few small ones.

"**Snow**" is a main crop potato but makes an early and quick growth. Try it.

Price, 1 doz. eyes, postpaid, 30c; 4 lbs. whole potatoes, 80c; by Freight or Express, per peck, 75c; $\frac{1}{2}$ bu., \$1.25; bu., \$2.00; 100 lbs., \$3.00.

American Wonder

American Wonder is not only one of the best main crop potatoes, but is also one of the earliest potatoes grown. It is a strong grower, and great producer. Tubers white, large and uniform in size; elongated, slightly compressed, with few eyes, and is of good quality.

Price, postpaid, 4 lbs. whole potatoes, 60c; Frt. or Exp., peck, 75c; $\frac{1}{2}$ bu., \$1.00; bu., \$1.75; 100 lbs., \$2.50.

Write for price in quantity.

Burbank

A standard commercial variety. We can offer a splendid strain of select Burbanks, not the "run-out" stock generally seen, but the genuine article, which is a really good potato.

Price, postpaid, 4 lbs. whole potatoes, 80c; Frt. or Exp., peck, 75c; $\frac{1}{2}$ bu., \$1.00; bu., \$1.50; 100 lbs., \$2.00.

Hundred Fold

A splendid new main crop variety of the same general type as Uncle Sam, but surpassing that excellent variety in many ways, being a splendid dry land Potato, an enormous yielder and of the finest quality, being white, dry and mealy at any stage of development. The skin is russet, which is a mark of quality.

Hundred fold is very hardy, with small vines, but the tubers are large and uniform.

Price, postpaid, 1 doz. eyes, 30c; 4 lbs. whole potatoes, 80c; Frt. or Exp., pk., 75c; $\frac{1}{2}$ bu., \$1.00; bu., \$1.75; 100 lbs., \$2.50.

IF IN DOUBT: WRITE US.

We can furnish crop reports from enthusiastic growers that will astonish you. It has paid others to plant our select stock. IT WILL PAY YOU.

THIS IS THE YEAR TO PLANT

growers, and plantings will not be as heavy.

—market is low—blight has discouraged many
This means better prices next year.

SEED OATS

THE production of fine seeds oat has always been one of our leading specialties and we consider them to be the most profitable and satisfactory grain crop, being indispensable to stock and dairymen, and their use as a food is constantly increasing.

Why You Should Grow Oats

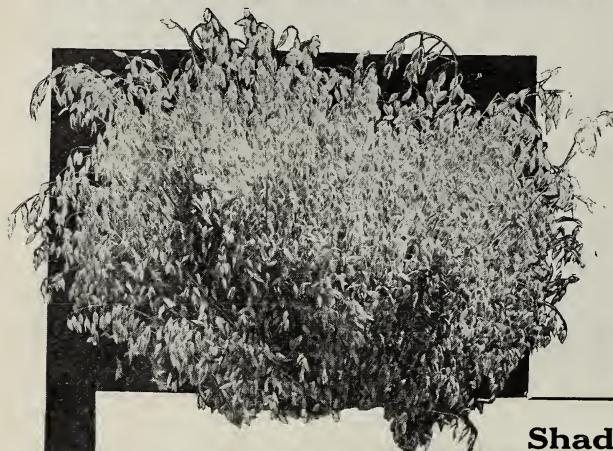
The demand becomes greater each season. Oats always sell at a profitable figure, and there is always a market.

Planted in season, oats rarely fail, are easily and cheaply grown, and the valuable new varieties which we offer will yield double the number of bushels per acre that you would get from common seed oats, which means half the cost of production, or twice the profit.

They will mature in July from spring sowing, giving quick returns and leaving the soil in good condition for fall planting.

Of what other grain crop can so much be said and what other crop is more necessary and valuable to the dairy and stock man?

We offer select, recleaned, well-matured seed oats of standard varieties, suitable for this section, and our own varieties, "SHADELAND CHALLENGE" and "SHADELAND CLIMAX," the earliest and most vigorous, heaviest yielding oats ever grown anywhere.



Shadeland Oats

"SHADELAND CHALLENGE." Best White side oat for general purposes, either fall or spring planting, will exceed your greatest expectations.

"SHADELAND CLIMAX." For early spring planting under difficult conditions, for short dry seasons and for those who prefer a tree oat "Climax" is unequalled and will never disappoint you. They have no equals either in yield, vitality or hardiness, as grown by our experienced oat specialist who by careful selection and skill in propagation has improved and developed these strains to their present standard of superior excellence.

Shadeland Climax

Our "Shadeland Climax" tree oat continues to give splendid results in every section where trials were made, and for early spring planting where seasons are short, in high, dry altitudes, and where quick growth and early maturity are demanded, is superior to any Oat ever before known, and will give you a bountiful harvest of the finest oats you ever saw. The white grains are uniformly large, plump and full with a very thin hull and are borne 3 in a spikelet, which partly accounts for its wonderful yield.

In our trials "Shadeland Climax" was not injured by severe early freezing and later drought, but stood up, green and vigorous, yielding one hundred bushels per acre on hill land when oat crops throughout the same section were stunted and dried up.

If you live west of the Cascade Mountains you can plant "Climax" fall or spring, any time the ground is fit, but where the climate is severe, spring plantings are best.

Price, postpd, 1 lb., 20c; 4 lbs., 70c; Frt. or Ex., $\frac{1}{2}$ bu., \$1.00; bu., \$1.50; 100 lbs., \$4.00.

Why You Should Grow "Shadeland Oats"

 "SHADELAND OATS" are grown especially for planting purposes and each year typical heads are selected in the field by hand, and from these new seed is grown for revitalizing and perpetuating the type, and maintaining the standard.

"CLIMAX" will give best average results under any and every condition,

"CLIMAX"

 READ

\$672.00 Prize Money on 400 lbs. "CLIMAX"

Kind Sirs:

When I was at your store last winter I looked at your Shadeland oats, and later ordered 400 lbs. I raised from that seed the oats that took first prize at Kendrick first at Moscow, and first at Spokane. I got \$9.00 in prize money from one peck of oats. The Spokane Chamber of Commerce took the sample at Spokane. They sent it to Lethbridge, Alberta, and won sweepstakes on the exhibit that it was in. It was then taken to Minneapolis. A sample in sheaf was in the exhibit from Kendrick which won \$70.00 sweepstakes at Moscow, \$443.43 sweepstakes at Spokane, and \$150.00 at Lewiston-Clarkston, and is now at Minneapolis.

Kendrick, Idaho, 11-21-'12.

Yours truly, B. E. CALLISON.

"SHADELAND" Oats received the Frist Prize at the Northwest Land Show, Portland, Nov. 18-23, 1912

"Shadeland Challenge"

OUR wonderful white side "Challenge" Oat is hardy, vigorous, early maturing, and still maintains its supremacy as the best, heaviest yielding, general purpose Oat in existence.

"**Shadeland Challenge**" is a heavy, plump, thin hulled oat whose immense heads often measure 18 inches in length, bearing from 250 to 300 kernels. Shadeland Challenge ripens in about 100 days from planting if spring sown, and 100 bu. per acre is not uncommon on ordinary soil. We introduced "**Shadeland Challenge**" as a spring Oat, but careful and conclusive tests have demonstrated that it gives even better results, if possible, from fall planting. Hundreds of our customers from every section have testified to the wonderful yield and splendid quality of this grand Oat. **Price, postpaid, 1 lb., 20c; 4 lbs., 60c; Frt. ½ bu. 75c; bu., \$1.25; 100 lbs., \$3.25.**

FROM OUR GROWER:

"Following our usual practice of renewal of seed by selection, we carefully beat out by hand **one and one-half pounds** seed from typical heads of '**Challenge**', planting April 1st in four rows eighty yards long, twenty inches apart. They were kept clean and made a wonderful growth and at harvest, July 31st, were five feet high. Many of the stools from a single grain carried **twenty full heads** and the four rows threshed **310 pounds**, showing that selected '**Challenge**' is losing none of its wonderful vigor and productiveness, also proving that our method of selection and propagation is not only retaining the original stock at its best, but gives promise of even more wonderful results."

To know that you are getting the genuine "Shadeland" oats from the originator, always buy direct from our Portland Store. Prices are so low that you can not afford to risk any other seed oat.



Standard Seed Oats

Choice Recleaned Stock of the following varieties can always be supplied.

Gray Winter

This Oat is planted extensively throughout the Northwest as a fall or winter Oat. Is well and favorably known, being a good yielder, and the Oats are large and plump.

Price, postpaid, 1 lb., 15c. Frt. or Exp., 100 lbs., \$2.20.

White Seed Oats

We always try to have a selected re-cleaned stock of No. 1 White Seed Oats which we can supply at market price. Write for samples and prices on the quantity you require, or send in your order. You will always get full value for money sent.

Price, postpaid, 1 lb., 15c; 100 lbs., \$2.10.

Black Russian

A hardy winter tree Oat that will thrive on any well drained soil. Straw medium to large; stands up well, ripens early and yields heavily. Our stock is true and clean.

Price, postpaid, 1 lb., 15c; 100 lbs., \$2.25. Swedish Red

A comparatively new tree Oat from Sweden having a soft hull and fine soft straw which is ideal for hay. This is the Oat grown so extensively in Northern California and along the Southern Oregon Coast. Sow in fall or winter. Red Oats always bring a good price in the market.

Price, postpaid, 1 lb., 15c; 100 lbs., \$2.25.

Formaldehyde

**A Sure Preventive
for Smut in Grain.**

This has proved to be much better than vitrol, etc., for treating grain to prevent smut. Also potatoes for blight and scab.

Formaldehyde is a clear chemical, resembling water, but has a peculiar odor. It is sold by the pound (pint). One pound is sufficient to treat 40 to 50 bushels of oats.

The following method is in general use: To treat 20 bushels requires $\frac{1}{2}$ pint of Formaldehyde diluted with 5 gals. of water. Spread the oats on a floor and sprinkle with the diluted solution. Then turn them twice with a scoop shovel. Allow to stand for 12 hours. Then spread to dry. Any quantity can be treated by using the same proportions. Oats thus treated will be entirely free from smut.

FORMALDEHYDE FOR POTATO SCAB.

Soak the tubers before cutting for one hour and a half in a solution of 1 lb. (or pint) of Formaldehyde to 30 gallons of water. The potato fungus lives in the soil and on old vines; hence it is wise to keep it off your land by using Formaldehyde for your seed potatoes.

Price, pint bottle, 40c; sent by Freight or Express only, at purchaser's expense. Cannot be mailed. 2 lb. bottle 75c; 1 gallon jug \$2.50.

CLOVER AND GRASS SEEDS

THERE are many varieties of grasses and forage plants offered by Eastern seedsmen (often under new names) that will not give profitable crops in our climate, and to avoid disappointment, we refer you to the following list, which has been carefully selected and contains the most desirable varieties for general and special purposes.

A careful reading of the following pages will give you much valuable information that has required years of observation and experimenting to obtain.

IMPORTANT, Read Carefully

Clover, Grass and Field Seeds are subject to market changes, therefore we can not print prices good for any length of time. When ready to buy, write us for special prices, stating quantity wanted; or send in your order at catalog prices. We guarantee that we will give you full value for the money sent, whether the price at the time you order be higher or lower, or if the difference is very great, we will notify you before shipment.

 **YOU WILL ALWAYS GET YOUR MONEY'S WORTH.** 

Alfalfa or Lucerne Clover

ALFALFA should be cut just before coming into bloom. The hay is especially valuable for dairy cows. As soon as cut it immediately commences to grow, and during the hottest and driest weather, when other grasses are parched and withered, it remains fresh and green and grows as rapidly as ever. On the low lands it is not an unusual thing to harvest five or six crops of hay from the same field in one season without irrigation, and the same result is obtained on high, dry lands where irrigation is resorted to. It will not succeed on hard clayey soils. Its roots, in seeking moisture, penetrate to incredible depths. The seed should be sown in the spring, after danger from freezing the young plants is over, or in the fall, early enough to give it a good stand before frost.

Dry Land Alfalfa

This new Dry Land Alfalfa will produce large, profitable crops of hay and excellent pasture on the high, dry lands of Eastern Oregon, Washington, Idaho and Utah. Dry Land Alfalfa is especially recommended for the hills and plateaus where irrigation is impossible. It comes from the highest, driest alfalfa sections, and is very superior seed.

Per lb., postpaid, 30c; 100 lbs., \$18.50.

Write for prices on 100 lbs. or ton lots. They are always subject to market changes.

Turkestan Alfalfa

Will produce a luxuriant growth in the driest and hottest sections, without irrigation. It is perfectly hardy and will stand extreme cold in winter without harm. It yields a very heavy and rich crop of hay and makes a permanent pasture. We have the genuine imported seed.

Per lb., postpaid, 30c; 100 lbs., \$19.00.

Clovers

White Dutch Clover

(Trifolium Repens.)

A small variety, having a white blossom. Of a vining nature, spreading rapidly. Superior for pasture and unsurpassed for the production of honey. It also makes a beautiful lawn when mixed with Blue Grass.

**Choice Seed, per lb., postpaid 65c; 10 lbs. \$5.00.
Fancy Seed, per lb., postpaid, 70c; 10 lbs., \$5.50.**

Red Clover

(Trifolium Pratense.)

The standard Clover for all purposes. Hardy and succeeds well on any good soil. Makes superior hay—especially mixed with Timothy—either for dairy cows or for general use.

Per lb., postpaid, 35c; 100 lbs., \$20.50.
Fancy, 100 lbs., \$22.00.

Mammoth Red Clover

Grows very large and is used almost exclusively for plowing under for manure.

Per lb., postpaid, 35c; 100 lbs., \$25.00.

Bokhara Sweet or Honey Clover

(Mellilotus Alba.)

A rapid-growing, white-flowered sort; excellent for bees. Sow 10 pounds per acre.

Per lb., postpaid, 30c; 100 lbs., \$19.00.

Crimson or Scarlet Clover

(Trifolium Incarnatum.)

See Cover Plate

Highly commended for pasture and fertilizing purposes. It is a thrifty annual, growing from twenty to thirty inches high. It germinates quickly, grows rapidly and stools abundantly. Cut for hay when in full bloom. Planted in the fall can be plowed under after blooming in the spring and be followed with barley or potatoes.

Per lb., postpaid, 28c; 100 lbs., \$15.00.

Alsike or Swedish Clover

(Trifolium Hybridum.)

A perfectly hardy perennial variety which is rapidly growing in popular favor. Excellent for hay and pasture. Valuable for bees. Resists both drought and excessive moisture. The hay of this variety is greatly preferred by some to that of Red Clover, for the reason that it is generally finer, brighter and not so dusty, making it better for horses.

Per lb., postpaid, 35c; 100 lbs., \$24.00.
Fancy, 100 lbs., \$25.00.

Esparsette or Sainfoin

(Onobrychis Sativa.)

A deep rooting, perennial legume, extensively cultivated in dry, calcareous soils, which are too barren for Clover or Alfalfa. Sow 50 pounds per acre.

Per lb., postpaid, 30c; 100 lbs., \$17.00.

 **GRASS SEEDS are sold at lowest market price and
No Premiums can be given**

"Diamond Quality"**Grass Seeds**

 Grass Seed Prices subject to change without notice. See note top of page 38. 

"Diamond" Fancy Lawn Mixture

To have a good lawn the soil must be fine and rich, and well leveled. Then the best seed obtainable should be used. Plant any time from September until late spring, depending upon the weather and soil conditions. Raking in the seed is advisable, and rolling greatly improves the turf. In watering your lawn soak it deeply and not too often, as light watering every day brings the roots close to the surface, where they quickly burn or dry out. You must not expect to make a fine lawn with cheap seed. The best lawn grass mixture will cost more at first than the poorer substitute, but it will be found much cheaper and more satisfactory in the end. Our "Diamond Quality" Fancy Mixed Grass Seed is prepared from the choicest recleaned Grass Seeds that have been carefully selected for their fineness and deep rooting, close growing habits and seasonal qualities, producing an ideal dense, velvety turf of lasting quality that remains green throughout the year.

Growing tests have proved our "Diamond Quality" Lawn Grasses to be superior to any other mixture for our Western soils and climate; it is also absolutely free from chaff and foul seeds, weighing 23 pounds to the measured bushel. This is a guarantee of clean, plump seeds, as cheap chaff seed is very light.

Price, per lb., 45c; postpaid, freight or express, per lb., 35c; 10 lbs., \$3.25.

Sow one pound to 400 square feet, 10 to 15 pounds to a 50-foot lot.

WRITE US FOR SPECIAL MIXTURES FOR TERRACES, SHADY PLACES, DRY OR WET LAND.

Fine Mixed Lawn Grass

For use where a temporary lawn must be quickly prepared, and if kept closely cut will be lasting and have a handsome appearance.

This is a good, clean mixture, composed of hardy, compact growing grasses, and for the price is a good value.

Kentucky Blue Grass

(*Poa Pratensis*.)

One of the best grasses for permanent pasture, furnishing a constant supply of the most nutritious feed during the greater part of the year. Sow 28 pounds per acre.

For Lawns.—Blue Grass is used very extensively for lawns and is found in all lawn grass mixtures. Sow 1 lb. to 400 sq. feet if used alone.

Per lb., postpaid 30c; 100 lbs., \$16.00.

Canadian Blue Grass

(*Poa Compressa*.)

Recommended in all pasture mixtures on dry soil; thrives well on clay or hard trodden and poor soil. Sow 28 pounds per acre.

Per lb., postpaid, 25c; 100 lbs., \$15.00.

English Rye Grass

(*Lolium Perenne*.)

A strong growing, hardy perennial grass, noted for its nutritive qualities. It is equally valuable for both grazing and hay. Forty pounds per acre.

For Lawns this is used and recommended by many gardeners. If sown thickly it makes a fine lawn, and for large grounds and parks it is very successful. Per lb., pd., 20c; 100 lbs., \$8.00

Crested Dogs Tail

(*Cynosurus Cristatus*.)

A perennial grass with short, narrow leaves; valuable for lawns or pastures on dry, light land; makes excellent sheep pasture. Use 20 pounds per acre if sown alone.

Per lb., postpaid, 50c; 10 lbs., \$4.00.

Bermuda Grass

(*Cynodon Dactylon*.)

Suitable only for climates where the winters are not below the freezing point. It stands the hottest and driest season. Sow six pounds per acre.

Per lb., postpaid, \$1.00.

Tall Fescue

(*Festuca Elatior*.)

Succeeds best in moist alluvial and strong clayey soils; is very productive and lasting; valuable for permanent pasture, is relished by stock and on rich land makes fine hay—height 3 to 4 feet; 22 lbs. bu.

Per lb., postpaid, 45c; 10 lbs., \$2.75.

Red or Creeping Fescue

(*Festuca Rubra*)

Forms a close turf and is valuable for lawn and golf mixtures; thrives in sandy soils and along the coast. (14 lbs. to the bushel.)

Price per lb. postpaid, 55c.

Fine Leaved Fescue

(*Festuca Ovina Tenuifolia*.)

Grows well on dry or poor soil and is much used for lawns. Plant 30 lbs. to the acre. (Bu. 14 lbs.)

Price, per lb., postpaid, 75c.

Creeping Bent Grass

(*Agrostis Stolonifera*.)

Well adapted for sandy pastures, near the coast, and good for pasture on low lands. If sown alone, use 25 pounds per acre. Excellent for lawns. Use 12 to 15 pounds per 50-foot lot.

Per lb., postpaid, 45c; 100 lbs., \$30.00.

Rhode Island Bent

(*Agrostis Canina*.)

Resembles Red Top. Makes a close sod; valuable for permanent pastures and meadows. Twenty-eight pounds per acre. For lawns, use 12 to 15 pounds per 50-foot lot. Gives good results.

Per lb., postpaid, 45c; 100 lbs., \$30.00.

Italian Rye

(*Lolium Italicum*.)

A quick-growing grass, attaining a height of 2 1/2 to 4 feet; very desirable for temporary meadows or pastures (will last from two to six years). Thrives best on soils that are slightly moist, and will even stand considerable overflow. Grows easily and bears an abundance of foliage that makes the best and sweetest hay imaginable. Sow 40 pounds per acre.

Per lb., postpaid, 25c; 100 lbs., \$8.75.

Sweet Vernal

(*Anthoxanthum Odoratum*.)

Valuable to put in pasture mixtures and lawn grass on account of its earliness and its delightful fragrance when in bloom. Thrives under all growing conditions, but is only recommended for use in mixtures. If sown alone use 28 lbs. per acre.

Per lb., postpaid, 35c.

Wood Meadow Grass

(*Poa Nemoralis*.)

Thrives in shaded situations in woodland parks or lawns where other grasses would not grow. Is early, permanent, hardy, resists heat and cold and makes a good turf, and is good for pasture; 3 lbs. to acre; 19 lbs. to bu.

Per lb., postpaid, 60c.

Water Meadow Grass

(*Poa Aquatica*.)

An excellent pasture grass for wet situations. Does well in bogs and marshes. 20 lbs. to acre, 11 lbs. to bu.

Per lb., postpaid, 60c.

GRASS SEED—Continued

 **Grass Seed prices subject to change without notice. See page 38** 

Timothy

(Phleum Pratense.)

This is the most valuable of all grasses for hay. Thrives best on moist, loamy soil. Sow early in the spring or fall. Sow 15 to 20 pounds per acre.

Per lb., postpaid, 20c; 100 lbs., \$8.00.**Orchard Grass**

(Dactylis Glomerata.)

One of the most valuable of all the cultivated grasses, blooming with Red Clover, and making with it admirable hay. As a pasture grass it is more productive than any other, and does best under close feeding. Sow 28 pounds per acre.

Per lb., postpaid, 30c; 100 lbs., \$17.00.**Red Top**

(Agrostis Vulgaris.)

A good perennial grass. Generally sown for permanent pastures. Does best on moist or even marshy land. If the ground is not overflow land it is advisable to mix it with Meadow Fescue, Orchard Grass or Alsike Clover. Sow 28 pounds per acre chaff seed: 14 pounds hulled.

Choice Chaff per lb., postpaid, 20c; 100 lbs., \$8.50.

Choice Hulled, a very superior grade of Red Top that is free from chaff and light seed.

Per lb., postpaid, 30c; 100 lbs., \$18.00.**Meadow Fescue**

(Festuca Pratensis.)

Perennial; grows three to four feet high. Roots deep, thus resisting drought. It succeeds on any ordinary soil; yields a heavy crop of superior hay; one of the best grasses for pastures, being valuable to mix with other kinds. Sown alone, use 40 lbs. per acre.

Per lb., postpaid, 25c; 100 lbs., \$14.00.**Bromus Inermis****(Russian Forage Grass—Awnless Brome Grass).**

This **Bromus**, on account of its strong perennial character, and its unusual drought-resisting powers, is the best grass we have for the semi-arid regions of the Northwest. It will stand the longest drought of all foliage plants. Its running roots take a deep and permanent hold upon the land, and it will replace in a large degree, the fast disappearing Bunch Grasses of Eastern Oregon and Eastern Washington, where it has done well. It grows luxuriantly, is freely eaten in either the dry or green state by cattle and yields enormously, making the **best of hay** for horses and cattle. It is a perennial and yields from 4 to 6 tons to the acre. Sow 25 to 30 pounds per acre, spring or fall. Seed weighs 14 pounds per bushel.

Per lb., postpaid, 30c; 100 lbs., \$18.00.

Special Pasture Mixtures**No. 1. For Good Loamy Soil**

A mixture of Grasses and Clovers, prepared especially for good, loamy soils, that will give satisfaction as a permanent pasture, or for mowing for mixed hay. For pasture, sow 20 pounds per acre.

Price, postpaid, 35c per lb. By freight or express, 10 lbs., 25c per lb.; 15 to 50 lbs., 24c per lb. 100 lbs., \$23.50.**No. 3. For Light Sandy Soil**

An extra fine mixture for sandy or light soils. This will make a good, strong turf, that under ordinary circumstances should last for many years. Sow 20 pounds per acre.

Price, postpaid, 35c per lb. By freight or express, 10 lbs., 25c per lb.; 15 to 50 lbs., 24½c per lb.; 100 lbs., \$24.00.**Tall Meadow Oat Grass**

(Avena Elatior.)

Often attains a height of three to four feet by the middle of June. Makes splendid hay and thrives on sandy loam, but makes its best growth where there is some clay. Can be fed as a pasture grass, and will generally bear cutting three times. For mixing with Perennial Rye and Alfalfa for sandy soils it is excellent. Sow about 30 to 40 pounds per acre alone, or half that amount if mixed with the above varieties.

Per lb., postpaid, 35c; 100 lbs., \$22.00.**Mesquite**

(Holcus Lanatus.)

It is usually sown on virgin soil, without cultivation, after the ground has been burned over. Sow about 35 pounds to the acre chaff seed; hulled 15 pounds per acre.

Fancy Hulled Seed, per lb., postpaid, 30c; 100 lbs., \$17.00.**Chaff Seed, Choice; per lb., postpaid, 20c; 100 lbs., \$9.00.****Hard Fescue**

(Festuca Duriuscula.)

Fine, rather dwarf, justly noted for its drought-resistant qualities. Valuable as a pasture for sheep. Sow 20 pounds per acre.

Per lb., postpaid, 40c; 10 lbs., \$2.50.**Rough-stalked Meadow Grass**

(Poa Trivialis.)

A most valuable grass which flourishes in moist, rich soils. Roots are perennial, but soft; foliage freezes down.

Per lb., postpaid, 60c; 10 lbs., \$4.25.**Sheep's Fescue**

(Festuca Ovina.)

Grows freely in high, dry and open pastures. Its chief merit is for sheep pasture. Thirty-five pounds to the acre.

Per lb., postpaid, 40c; 10 lbs., \$2.75.**Water Fescue**

(Glyceria Fluitans.)

This grass grown naturally in and beside ditches, pools, rivers and marshes. Sow 15 to 20 pounds per acre, fall or spring.

Per lb., postpaid, 60c.**Reed Canary Grass**

(Phalaris Arundinacea.)

Will Grow on the Wettest Land You Have.

A grass that will grow on stiff, wet land, even if the ground is overflowed for a month or six weeks. Makes a good hay if cut early in the season. Sow 10 pounds per acre.

Price, ¼ lb., 35c; lb., 85c, postpaid.**No. 4. For Dry Land**

Mixed especially for the regions between the Cascades and Rocky Mountains, and on good, common wheat land. Try this mixture, as we believe that it will give you best possible results. Sow 20 pounds per acre.

Price, postpaid, 35c per lb. By freight or express, 10 lbs., 25c per lb.; 15 to 50 lbs., 24½c per lb.; 100 lbs., \$24.00.**No. 8. For Arid or Alkali Land**

Particularly for arid alkali lands. This mixture is composed of varieties that have proven to be the best for the soils mentioned. Sow 20 pounds per acre.

Price, postpaid, 35c per lb. By freight or express, 10 lbs., 27c per lb.; 15 to 50 lbs., 26c per lb.; 100 lbs., \$25.00.

GRASS SEED — Continued

Grass Seed prices subject to change without notice. See note on Page 38.

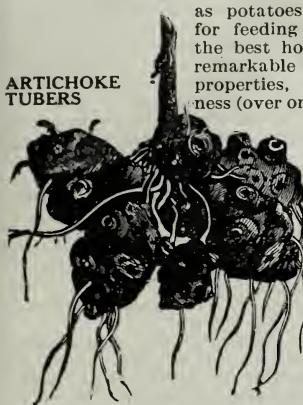
Field and Miscellaneous Farm Seeds

Single pound prices include postage. If ordering by freight or express deduct 10c per pound; 100-pound prices subject to market changes. Seed to cover amount remitted always sent unless otherwise ordered. See note top page 40. Write for prices on large quantities.

Artichokes

There is an unlimited market for Hogs and Artichokes are the cheapest and best feed. They never fail. They are also valuable to dairymen, being cheap, and good milk producers.

ARTICHOKE TUBERS



Planted and cultivated same as potatoes. Of great value for feeding stock. They are the best hog feed known; are remarkable for their fattening properties, great productivity (over one thousand bushels having been raised on one acre) and ease with which they can be grown. They need not be dug. Turn the hogs into the field, and they will help themselves by rooting. One acre will keep from twenty to thirty hogs in condition from October until

April, except when the ground is frozen too hard for them to root. They are said to be a preventative of cholera, and other hog diseases, and are also highly recommended for milch cows, increasing the yield of milk and at the same time improving their condition. Plant ten bushels per acre early in the spring.

Note.—Tubers on hand from January to May.

Per lb., postpaid, 15c; 100 lbs., \$2.00.

BUCKWHEAT

Buckwheat is a valuable crop that can be easily grown wherever wheat will grow, producing a good yield even on light or poor soil and under favorable conditions is very profitable, being in big demand for milling—and is also the best "Bee pasture."

Sow 36 lbs. per acre in drills, 48 lbs. broadcast. We recommend the Japanese variety.

Common Per lb., postpaid, 20c; 100 lbs., \$4.00.

Silver Hull. Of a light gray color, rounder than the common; has a thin husk; matures earlier and yields heavily. An excellent milling variety.

Per lb., postpaid, 20c; 100 lbs., \$4.00.

Japanese. Ripens early—is hardy and yields the largest crops. The grains are extra large dark brown, very thin hulled and makes the highest grade of flour. Good seed stock has been very scarce for several seasons, but we now have a fine lot which we can offer at a very low price.

Per lb., postpaid, 20c; 100 lbs., \$4.00.

Cheat Seed

Cheat yields a good crop of hay, especially on low or moist soil and will stand considerable overflow without harm. It makes an excellent hay for cows or horses, but should be cut before it gets too ripe. Sow in the fall or early spring same as oats and about 100 pounds per acre.

Per lb., postpaid, 15c; 100 lbs., \$1.85.

Cow Peas

Are really small beans of vigorous vining habit and heavy foliage of great nutritive value, yielding five to nine tons of green feed per acre, or can be cut and cured like clover. They are great nitrogen gatherers and one of the best fertilizers when turned under. Sow two bushels per acre.

Whip-Poor-Will. Upright, or bush growth, earliest maturing, easily harvested.

Per lb., postpaid, 20c; 10 lbs., 85c; 100 lbs., \$7.25.

Clay. Of vigorous growth. Excellent for ensilage; can be planted in hills with corn.

Per lb., postpaid, 20c; 10 lbs., 85c; 100 lbs., \$7.25.

Egyptian Corn

Also called Jerusalem Corn or Dhoura.

One of the non-saccharine sorghums, requiring the same growing conditions. Succeeds well in dry sections. Producing small heads on side shoots up to eight on a stalk, the seed is larger than Kaffir corn. Yield is heavy. Makes fine chicken feed. Plant three pounds per acre.

White, Per lb., postpaid, 15c; 100 lbs., \$4.00.

Red, Per lb., postpaid, 15c; 100 lbs., \$4.25.

Emmer**Triticum dicoccum.**

Highly recommended by the Department of Agriculture as a forage or grain crop for the northwest; similar to barley in growth, but produces two grains in a spikelet. A comparatively new and profitable crop, yielding 50 to 100 bushels of grain, or four to six tons good hay per acre. Thrives well on poor soil, and dry weather seems not to affect it. After threshing, the straw makes good feed. Sow in spring at rate of 75 to 100 pounds per acre. It is advisable to roll or chop the grain before feeding. Emmer is often listed and referred to as "Spelt," but is very different and superior in every way. We offer choice, recleaned seed of the true variety. Write to the U. S. Department of Agriculture for Farmers' Bulletin No. 466.

Price, postpaid, per lb., 15c.

Kaffir Corn

An excellent fodder plant, yielding a large crop of fodder during a season. Grows four to five feet high; upright stalk, with numerous large leaves. Greatly relished by cattle and horses. The seed crop is also heavy, sometimes yielding 60 bushels to the acre. It does best sown in drills three feet apart, using six to eight pounds of seed per acre.

Per lb., postpaid, 15c; 10 lbs., 45c; 100 lbs., \$4.00.

Milo Maize

This is one of the sorghums similar to Kaffir corn. Grows erect, with thick, close-jointed stalk. Height, 4 to 7 feet. Heads are very large, giving a heavy grain yield; is drought resistant, and succeeds on alkali soil. Plant late when ground is warm, 3 to 6 pounds per acre.

Per lb., postpaid, 20c; 100 lbs., \$5.00.

Seradella

A valuable leguminous forage plant—can be cut twice in one season. Succeeds well in dry sandy soil, good for sheep pasture and can be cut for hay. May be sown with winter rye. Sow 50 lbs. per acre.

Per lb., postpaid, 30c; 100 lbs., \$15.00.



Write for Prices on 100-Pound and Ton Lots.

FIELD AND MISCELLANEOUS FARM SEEDS — Continued

BARLEY

BARLEY is a shallow feeder, the roots growing near the surface, and requires a rich, mellow soil. Barley responds readily to good tillage and any extra work with the disc and fine tooth harrow will be amply repaid. Do not try to grow upon poor, sandy or wornout soils, or where the ground is not in good condition or well drained. In rotation, Barley follows Corn, Peas, Potatoes, or any cultivated crop, and is the best nurse crop for starting clovers or mixed grasses. Should be planted late after ground is warm and spring weather settled. Plant two bushels per acre. Crimson Clover planted in the fall and plowed under after blooming in the spring, leaves the soil in fine condition for barley.

New—"Oderbrucker" Barley

See Cover Plate

This is a Pedigreed strain of 6 row barley selected and bred by the University of Wisconsin and is considered the earliest maturing, most prolific of all the barleys. This is the variety that was secured at great expense by the Oregon and Washington Railroad Co. for introduction in their territory. We offer the genuine stock of our own growing.

Price: 1 lb., postpaid, 20c. Frt. or Exp., 10 lbs., 60c; 100 lbs., \$5.00.

White Hulless or Bald Barley

White Hulless, or Bald Barley. A grand barley for stock feeding. Grain plump, heavy and when threshed is hulless like wheat. A heavy cropper. When grown and cut for hay it produces a magnificent fodder, which is very rich and almost equal to a grain feed. Much relished by horses and stock of all kinds. An excellent hog feed. Culture same as Common Barley.

Per lb., postpaid, 15c; 100 lbs., \$3.00.

Common Barley

We always aim to have a nice, clean stock of good Seed Barley on hand at all times.

Per lb., postpaid, 15c; 100 lbs., market price.

Field Peas

Field Peas are a very profitable crop and are grown here very extensively. They can be grown alone or with oats. When planted with grain and cut green they make a large amount of very rich feed; also very valuable for enriching the soil if plowed under. The dry peas make excellent hog-feed and are quite fattening. Sow, if alone, 120 pounds to the acre; if with other grain, 60 pounds.

White Canadian

A leading kind; seed almost white; a heavy cropper. **Per lb., postpaid, 20c; 100 lbs., \$4.75.**

Blue Prussian

Very much like the above, except in color. This variety is largely sold for soup peas.

Per lb., postpaid, 20c; 100 lbs., \$5.00.

Swiss

A three-cornered pea; excellent for cooking purposes. Vines small. One peculiarity of these peas is that they are never infested with bugs.

Per lb., postpaid, 20c; 10 lbs., 85c.

Flax Seed

We have a splendid lot of select recleaned Western-grown Flax, new crop, large plump seed.

Per lb., postpaid, 25c; 100 lbs., \$8.00.

Lentils

Succeed best in dry, sandy soil. A leguminous annual, the seeds of which are valuable for pigeons and are used largely for soups. The leafy stalks make good forage.

Per lb., postpaid, 20c; 10 lbs., 90c; 100 lbs., \$8.00.

Beardless Barley

See Cover Plate

Beardless. The earliest barley known. The straw is about the height of the Common Barley, but better, and will stand up on any land; with good season and land, has produced 80 bushels per acre. Sow as early as you can; frost does not hurt it. Many farmers will not grow barley on account of the long, harsh beards which are so disagreeable in threshing, although it is a profitable crop. This is beardless, and as easy to grow and handle as oats. It is becoming more popular each season. **Per lb., postpaid, 15c; 100 lbs., \$2.75.**

Black Hulless Barley

**Best of grains for feeding or fattening stock.
Greater food value than corn.**

Black Hulless Barley will thrive on the dry Alkali soil where no other grain will grow. Sow in the fall or spring as late as June 15, 75 to 100 lbs. per acre. Will yield as high as 75 bushels to the acre, weighing about 70 lbs. to the measured bushel; does not shatter or shell out easily.

When planted in the fall its abnormal stooling habit and wide succulent leaves make it ideal for late fall pasture; yielding a full crop the next season. Stock prefer it to any other food

Per lb., postpaid, 15c; 100 lbs., \$3.00.

Cow Kale

(Or Thousand Headed Kale.)

The great demand for this wonderful forage plant proves it to be the most valuable green feed for Pacific Coast dairy and stockmen; endorsed by Agricultural Colleges and Government Stations. Cow Kale should be grown in the same manner as cabbage. Make the rows 4 feet, plants 3 feet apart in the row. Can be set as late as July. Write for full information on Planting and Feeding.

Postpaid, 1 oz., 10c; ½ lb., 20c; 1 lb., 60c.

Millets

Sow in April, May or June, 12 to 15 pounds for seed or 20 to 30 pounds for hay per acre.

German, or Golden

An improved variety, yielding a larger crop of seed than the Common Millet. It is also taller than the Common, and yields a heavier crop of hay. **Per lb., postpaid, 20c; 100 lbs., \$5.25.**

Hungarian

A dwarf annual Millet. It is finer than the Common or German Millets, but produces a closer stand and yields almost as much per acre as the taller varieties. Superior for hay.

Per lb., postpaid, 20c; 100 lbs., \$5.00.

New Siberian

New and wonderfully productive. Extremely hardy, and about two weeks earlier than the German Millet, growing about four feet in height.

Per lb., postpaid, 20c; 100 lbs., \$5.00.

Common

A variety growing from three to four feet high, having rather broad blades and strong stalks.

Per lb., postpaid, 20c; 100 lbs., \$4.50.



A "CLIPPER" Grain Cleaner improves the quality and increases the yield of any grain crop. When you buy a tanning mill BE SURE YOU GET A "CLIPPER." Special Catalog FREE.

FIELD AND MISCELLANEOUS FARM SEEDS—Continued

 Prices on Farm Seeds subject to change. See note, page 38. 

Seed Wheat

When ready to buy any variety of Seed Wheat, write us for quotation on quantity wanted or send in your order and we will give full value at lowest market price.

"PROHI" White Winter Wheat

"Prohi" is the most productive and desirable Wheat for general planting, giving splendid results in the dry sections east of the mountains and out-yielding all other varieties in the light hill lands of western Oregon and Washington, our seed crop yielded an average of 40 bu. per acre.

Heads are 4 1/2 inches long, large and well-filled. The straw is long and stands up well, but is not coarse. We recommend "Prohi" as the best wheat for you to grow. Our seed stock is true and of extra quality.

Price: 1 lb., postpaid, 20c. Frt. or Exp., 10 lbs., 40c; 50 lbs., \$1.50; 100 lbs., \$2.50.

Standard Varieties of Wheat

We can supply the following varieties which are extensively grown in the Northwest. Choice recommended seed.

Blue Stem

Little Club

Red Chaff

Red Fife

Red Russian

Forty-Fold.

Turkey Red

Rape, Dwarf Essex

True Pure Seed.

One of the best forage plants, producing immense quantities of green feed when grass and other crops are dried up. Highly recommended by Prof. Shaw and other eminent authorities. Has yielded ten tons of green forage per acre with a food value double that of green clover. Excellent pasture for all stock, and fine green feed for chickens. Thrives on all soils and is ready for use in six to eight weeks from time of sowing. Also valuable for plowing under. Sow same as turnips from May until September or sow with grain. Use four pounds per acre in drills, eight pounds broadcast.

Price, postpaid, 1 lb., 25c. Frt. or Exp., 10 lbs., \$1.00; 100 lbs., \$8.00.

Salt Bush

This wonderful forage plant will grow freely in arid and alkali lands that will produce no other vegetation, yielding a marvelously liberal foliage, which is eagerly eaten by all kinds of stock. Single plants grown on the poorest alkali ground have reached a diameter of 16 feet in one season. One pound of seed will plant an acre if evenly scattered over the surface. The seed should be mixed with ten times its weight of sand or ashes to facilitate its distribution. Sow the seed in the fall or spring (winter sowing is not desirable), before a rain, if possible, on well pulverized soil, and cover it lightly (about one-eighth of an inch) with a light harrow or brush. If desired, plants may be grown and transplanted when two or three inches high, six to seven feet apart. If the weather is dry when transplanting, supply a little water to each plant. Pkt., 5c; oz., 10c; 1/4 lb., 40c; 1 lb., \$1.25, postpaid. Special price in quantity.

It Pays to Plant Our

Wenatchee, Wn.

Gentlemen:—Last Spring I bought of you one sack of your Earliest of All Potatoes from which I raised with ordinary cultivation 48 sacks.

Vetches or Tares (Common or Spring)

(Vicia Sativa.)

Greatest Forage Plant.

One of the best forage plants that can be grown on the Pacific Coast. Often called Fall Vetches. This is a species of the pea, and is grown very extensively in Western Oregon and Washington, especially in the Willamette Valley and on the Oregon Coast. It furnishes an abundance of excellent feed, either green or cut and cured for hay. The seed should be mixed with an equal weight of some variety of wheat, oats or rye having a stiff straw, and the mixture sown at the rate of two bushels per acre. Vetches weigh 70 pounds per bushel. Sow in the fall or early spring.

Per lb., postpaid, 15c; 100 lbs., \$4.00.

Vetches (Sand or Winter)

(Vicia Villosa.)

This variety thrives on poor, arid, sandy soils. It is sown either in the fall or early spring, and is generally mixed with rye, which serves to support the plants. It grows to a height of three or four feet, and can be cut twice; first, as soon as the bloom appears, and afterward for seed. The plant is perfectly hardy and makes a very nutritious food.

Per lb., postpaid, 30c; 100 lbs., \$17.50.

NOTE.—In ordering Vetches, be careful to state plainly which variety you want, as they are both sown in the fall or winter in Oregon and Washington.

Sunflower

Mammoth Russian. The largest and most productive variety. It makes one of the very best of foods for poultry; a great egg producer.

Per 1/4 lb., 10c; 1 lb., postpaid, 25c; 10 lbs., 90c.

Wild Rice

(Zizania Aquatica.)

For Planting in Duck Ponds.

And around hunting grounds to furnish food for wild fowl, ducks, geese, etc. Seed can be sown on the borders of lakes, ponds and small streams and grows very rapidly in one to four feet of water, attracting all of these wild birds from September on. It also purifies the water and affords a refuge for the small fry from the large fish. Fresh seed supplied in season.

Write for information and prices.

Rye, For Seed

Planted extensively in both spring and fall.

Per lb., postpaid, 15c; 100 lbs., \$2.10.

Sugar Cane or Sorghum

Early Amber, a valuable crop to grow for fodder or ensilage, as it furnishes an immense tonnage to the acre. When fed down while young it makes a rapid second growth.

Price, postpaid, per lb., 20c; 100 lbs., \$6.00.

Select Seed Potatoes

Corvallis, Ore., Nov. 25, 1912.

Gentlemen:—I got 20 lbs. of "Pride of Multnomah" seed Potatoes of you last winter and planted them in May and must say they are the most wonderful Potatoes I ever saw. From the 20 lbs. of seed I got 1200 lbs. of the finest Potatoes I ever saw.

 Write for prices on grains and field seeds in lots of 100 lbs. or more.

FERTILIZERS

BEING the largest dealers we carry the most complete stock of fertilizers and Fertilizing materials in the Northwest, and having installed modern machinery for regrinding and mixing our "Diamond Quality" Fertilizers, we can make immediate delivery in any quantity, ground to a fineness and blended to a mechanical perfection that make them superior to all other brands. Fertilizers that are machine mixed and fined are more thoroly and evenly blended, are more readily available and give uniformly better results than when mixed by hand.

DIAMOND QUALITY" FERTILIZERS are complete fertilizers of the highest grade and concentration, no inferior ingredients or cheap fillers are used in their preparation. Each package is marked plainly, showing the percentage of available plant food, as required by law.

Special Fertilizer Booklet giving complete analysis and price of the different fertilizers which we can supply, together with full information for their application, will be sent on request. This book is of great value to all interested in fertilizers.

The best results are obtained by applying fertilizers in the late fall or early spring. The average amount used is 600 to 1000 pounds per acre, but two or three times this amount is often used to advantage by market gardeners. Complete instructions will be found in our Fertilizer Booklet, sent free. If there is any special information you require, write us; your inquiries will have our prompt and careful attention and our experience may help you.

No. 1 — General Fertilizer

An all-round fertilizer, which can be used on any crop, but is especially adapted for grain and general farm crops. Analysis: Nitrogen, 2 to 2 $\frac{1}{2}$ per cent; phosphoric acid, 6 to 6 $\frac{1}{2}$ per cent; potash, 6 per cent.

Price: 10 lbs., 40c.; 100 lbs., \$1.90; per ton, \$36.00

No. 4 — Fruit and Strawberry

This fertilizer is also used for blackberries, raspberries, etc. We sell large quantities for growing the famous Hood River strawberries. Analysis: Nitrogen, 2 to 3 per cent; phosphoric acid, 7 to 8 per cent; potash, 9 to ten per cent. **Price:** 10 lbs., 40c.; 100 lbs., \$2.00; ton \$38.00

No. 5 — Odorless Lawn Dressing

Our No. 5 Diamond Lawn Fertilizer promotes a vigorous healthy growth giving the desired dark rich green appearance, can be used at the time the seed is planted and later as a top dressing. One hundred pounds is sufficient for an ordinary city lot, and is far more effective and less objectionable than stable manure. Remember, it contains no weed seeds. When used as a top dressing it is best to make several small applications about two weeks apart. **Price:** 10 lbs., 50c. 25 lbs., 75c.; 50-lb. sack, \$1.25; 100 lbs., \$2.25; ton, \$45.00.

No. 10 — Special Hop and Onion

A fertilizer made especially for hops; very rich in potash, and when used freely in hop yards has been known to double the yield and improve the quality of the hops. Be sure that you get "Diamond Brand." Analysis: Nitrogen, 2 $\frac{1}{2}$ to 3 per cent; phosphoric acid, 6 to 7 per cent; potash, 12 per cent. **Price:** 100 lbs., \$2.10; 500 lbs., \$10.25; ton \$40.00

Nitrate of Soda

For immediate results Nitrate of Soda is the very best for stimulating and forcing the growth of plants or any other crop.

Per lb., 5c; 100 lbs., \$3.25; ton \$62.00.

Land Plaster, or Gypsum

Made from pure gypsum, absolutely free from clay or other foreign matter. This is especially valuable for clover crops.

10 lbs. 25c; 100-lb. sack 75c; ton market price

Superphosphate

This is a concentrated form of phosphoric acid, and it is actually the cheapest form in which to buy phosphoric acid. Our present stock contains 17 per cent available phosphoric acid.

Price: Per lb., 5c; 100 lbs., \$1.55; ton \$28.00.

Ground Bone — Pure

Pure Ground Bone, fine ground, is one of the best fertilizers. This is the only grade of Ground Bone we are now manufacturing, and is all pure bone, reduced by improved machinery to an even fineness—nothing is added, and is free from any adulterant. This is a very valuable enricher of the soil, and one of the most economical at present prices.

Price: 5 lbs., 25c; 10 lbs., 35c; 100 lbs., \$1.75; ton, \$32.00.

Blood Meal

Pure Blood, cooked, dried and finely ground, a quick-acting fertilizer, analyzing very high in effective nitrogen; in fact, the nitrogen of Dried Blood is one of the most effective forms of organic nitrogen known. This also carries some phosphorous; is a strong fertilizer, a little going a long way. **Price: 5 lbs., 30c; 10 lbs., 50c; 100-lb. sack, \$3.50.**

Bone Tankage

Ground meat scraps and bone, desiccated in a vacuum, is very rich in phosphoric acid and nitrogen. **Price: \$2.00 per 100-lb. sack; \$37.00 per ton.**

Fish Guano

Fish scraps, cooked, dried and ground, is a strong fertilizer, high in nitrogen, carrying considerable phosphorous and used largely by vegetable growers. We do not recommend this for lawns or city use, as odor is objectionable.

Price: 100 lbs., \$2.50; ton, \$46.00.

Comparative Values

A 100-pound bag of high grade commercial fertilizer will contain more soluble and available plant food than 4,000 pounds (two tons) of stable manure of average quality. How much easier and cleaner to handle one 100-pound bag than tons of manure, and there are no weed seeds to worry over.

 **NOTE.—As Fertilizers are sold on a small margin, prices are subject to market changes but you will always get full value for your money.**

FERTILIZER—Continued

POTASH

One of the most important fertilizing elements. We are general agents for the German Kali Works, whose products are known and used throughout the entire world.

Their valuable literature will be sent free on application. If you are not informed on this subject, it will pay you to give it your immediate attention.

We receive direct importations and offer the following in original packages, or can supply any quantity, large or small, at lowest price.

MURIATE OF POTASH.

Price: Lb., 5c; 100 lbs., \$3.25; sack, 224 lbs., \$6.50; ton, \$64.00

SULPHATE OF POTASH

Price: Lb., 5c; 100 lbs., \$3.50; sack, 224 lbs., \$6.75; ton, \$62.00

KAINIT

Price: Lb., 3c; 100 lbs., \$1.50; sack, 224 lbs., \$2.35; ton, \$22.00

FARMOGERM

Farmogerm is the most satisfactory and active culture of nitrogen gathering bacteria.

Be sure to state the kind of seed you intend to inoculate.

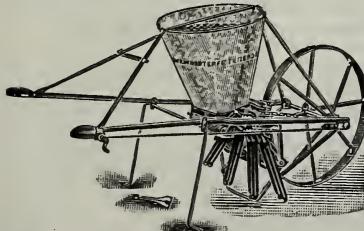
Of the three essential plant foods, Nitrogen, Phosphoric Acid and Potash, Nitrogen is the most important and expensive. The air is four-fifths Nitrogen and the soil is full of air, but plants can not extract Nitrogen from the air, except by a wonderful process of nature, through germ action, by which this vast store of Nitrogen is made directly available at a cost not to exceed \$2.00 per acre. This wonderful discovery was made, and since developed, by the U. S. Government Department of Agriculture and improved methods of preserving the bacteria in a dormant state ready to be used when needed have been perfected and the cultures are sold under the name of Farmogerm.

FARMOGERM is put up in a safe package and can be sent by mail. You simply add water and sprinkle on the seeds. It will increase your crop two to ten times. Write for pamphlet.

FARMOGERM must be sprinkled on the seeds before planting, and can only be supplied for the following: Alfalfa, White, Red and Alsike Clovers, Beans, Vetches, Cow Peas, Field and Garden Peas, and Flowering Sweet Peas. As yet no culture has been discovered for any other than leguminous plants.

Prices: Trial pkg., $\frac{1}{8}$ to $\frac{1}{4}$ acre, 50c; acre pkts., \$2.00; 5-acre pkt., \$9.00

Our fertilizers contain generous supplies of vital plant food. Being highly concentrated and readily available, small quantities only are needed for the production of the finest crops. THEY ARE QUICK IN ACTION, RELIABLE AND ECONOMICAL.



McWHORTER'S FERTILIZER DRILL

McWhorter Fertilizer Drill No. 21

For the Practical, Superior Distribution of Commercial Fertilizers—Simple in Construction, Easily Understood and Effective in Operation.

This machine needs no defense or praise from us. Wherever known, it is pronounced the best. Has a force feed without friction; does not require that degree of dryness in the fertilizer necessary to all other distributors we have seen; is so arranged that the fertilizer can be applied in any manner that may be desired, as the operator has perfect control of the spread and division of same, any change for that purpose requiring only a few seconds.

It will distribute the fertilizer in one or more furrows beside the growing crop or broadcast to any extent up to a uniform spread of over two feet, without removing or adding any part or loosening a bolt, and in any quantity from a few pounds up to forty or more pounds to the hundred yards of row, or from 200 pounds to over a ton to the acre. We call special attention to this ability to **spread** the fertilizer with this machine. It is a highly important feature and will be appreciated by the thinking farmer. A decidedly wrong thing is to apply the strong fertilizers of the present day without sufficiently spreading and incorporating them with the soil. **Shipping weight, 61 pounds.**

Price, complete, \$13.00.

Farmogerm is a practical success, and is endorsed by the United States Government. A \$2.00 package used on a leguminous crop will produce as much nitrogen as 8 tons of manure.



ROOTS SHOWING NODULES CAUSED BY NITROGEN GATHERING BACTERIA.

(Taken from a photograph by the United States Department of Agriculture).

BOOKS

Standard text and reference works by recognized authorities.
Special orders for books not listed will have prompt attention.

<i>Books are the inspiration, the authoritative guide, that enables you to command success, and you should have the standard references on the subjects in which you are interested.</i>		
All books postpaid at following prices	Binding Price	
Agriculture, The Principles of, Bailey, 336 pages, 5x7½ in.	C \$1.45	Note: C indicates cloth; P, paper cover
Alfalfa, The Book of, Coburn, 324 pages, 6x9 in.	C 2.20	Fruit Garden, Barry's, 516 pages, 5x7½ in.
Alfalfa, Practical Information on, Coburn, 161 pages, 5x7½ in.	C .60	Fruit Grower, The Practical, Maynard, 128 pages, 5x7 in.
Alfalfa Farming in America, Wing, 480 pages, 5½x8 in.	C 2.20	Fruit Growing, The Principles of, Bailey, 516 pages, 5x7½ in.
Apple Culture, Field Notes on, Bailey, 88 pages, 5x7½ in.	C .85	Fruit Harvesting, Storing, Marketing, Waugh, 224 pages, 5x7½ in.
Apple Orchard, The American, Waugh, 214 pages, 5x7½ in.	C 1.15	Fungi and Fungicides, Weed, 228 pages, 5x7½ in.
Asparagus, Hexamer, 166 pages, 5x7½ in.	C .55	Gardening for Pleasure, Henderson, 404 pages, 5x7½ in.
Barn Plans and Outbuildings, O. J. Co., 385 pages, 5x7½ in.	C 1.10	Gardening for Profit, Henderson, 376 pages, 5x7½ in.
Basket Making With Raffia, Morse, 30 pages, 5x7 in.	P .25	Gardening for Young and Old, Harris, 191 pages, 5x7½ in.
Beautiful Flower Garden, The, Matthews, 186 pages, 5x7½ in.	P .50	Garden Making, Bailey, 417 pages, 5x7½ in.
Blackberry and Raspberry Culture, Littooy, 48 pages, 3½x6 in., new edition	P .40	Ginseng, Kains, 144 pages, 5x7½ in.
Bulbs and Tuberous-Rooted Plants, Allen, 312 pages, 5x7 in.	C 1.70	Grape Culturist, The, Fuller, 282 pages, 5x7½ in.
Bush Fruits, Card, 537 pages, 5x7½ in.	C 1.70	Grasses and How to Grow Them, Shaw, 453 pages, 5x7½ in.
Cabbages and Cauliflowers, Broccoli, etc., Gregory, 93 pages, 5x7½ in.	P .40	Grasses and Forage Plants, Flint, 398 pages, 5½x8 in.
Cabbages, and Cauliflower, Etc., Allen, 125 pages, 5x7 in.	C .60	Greenhouse Construction, Taft, 210 pages, 5x7½ in.
Carnation Culture, American, Lamborn, 175 pages, 5x8½ in.	C 2.00	Greenhouse Management, Taft, 382 pages, 5x7½ in.
Celery for Profit, Greiner, 85 pages, 5x7½ in.	P .30	Hedges, Windbreaks, Etc., Powell, 140 pages, 5x7½ in.
Chrysanthemum, The, Herrington, 160 pages, 5x8 in.	C .60	Home Floriculture, 300 pages, 5x7 in.
Clovers and How to Grow Them, Shaw, 349 pages, 5x7½ in.	C 1.10	Homes for Home-Builders, King, 251 pages, 5x7½ in.
Cranberry Culture, White, 131 pages, 5x7½ in.	C 1.10	How to Choose a Farm, Hunt, 412 pages, 5½x7½ in.
Daffodils-Narcissus, Kirby, 235 pages, 5x7½ in.	C 1.10	How to Plan the Home Grounds, Parsons, 249 pages, 5x8 in.
Dairying, The Business of, Lane, 234 pages, 5x7½ in.	C 1.10	Injurious Insects of the Farm and Garden, Treat, 296 pages, 5x7½ in.
Dairying, Profitable, Peck, 174 pages, 5x7½ in.	C 1.35	Insects Injurious to Fruits, Saunders, 436 pages, 5x8 in.
Dairy Chemistry, Snyder, 190 pages, 5x7½ in.	C .85	Insects and Insecticides, Weed, 334 pages, 5x7½ in.
Draining for Profit and Health, Waring, 252 pages, 5x7½ in.	C 1.35	Irrigation for the Farm, Garden and Orchard, Stewart, 276 pages, 5x7½ in.
Dwarf Fruit Trees, Waugh, 125 pages, 5x7½ in.	C 1.35	Keeping One Cow, 136 pages, 5x7½ in.
Farm Appliances, Martin, 192 pages, 5x7 in.	C 1.10	Land Draining, Miles, 199 pages, 5x7½ in.
Farm Book, New American, Allen, 540 pages, 5x7½ in.	C 1.10	Landscape Beautiful, The, Waugh, 336 pages, 6x8½ in.
Farm and Dairy, The, Sheldon, 158 pages, 5x7½ in.	C 1.10	Landscape Gardening, Maynard, 338 pages, 5x7½ in.
Farmstead, The, Roberts, 350 pages, 5x7½ in.	C 1.10	Landscape Gardening, Waugh, 152 pages, 5x7½ in.
Farm Conveniences, 256 pages, 5x7½ in.	C 1.10	Lawns, and How to Make Them, Barron, 174 pages, 5x7½ in.
Farm Gardening and Seed Growing, Brill, 166 pages, 5x7½ in.	C 1.10	Manures, How to Make and How to Use Them, Sempers, 218 pages, 5x7½ in.
Farm Grasses of the United States, Spillman, 248 pages, 5x7½ in.	C 1.10	Manure, The Bommer Method of Making, 86 pages, 6x9 in.
Farm Stock, Burkett, 358 pages, 5x8 in.	C 1.10	Market Gardening and Farm Notes, Landreth, 215 pages, 5x7½ in.
Feeding and Management of Livestock, Shaw, 99 pages, 5½x8½ in.	C 1.65	Money in the Garden, Quinn, 268 pages, 5x7½ in.
Ferns, and How to Grow Them, Woolson, 156 pages, 5x7½ in.	C 1.10	Mushroom Culture and Pure Culture, Spawn, 33 pages, 5x8 in.
Fertilizers, Gregory, 137 pages, 5½x7½ in.	P .50	Mushrooms, How to Grow Them, Falconer, 169 pages, 5x7½ in.
Fertilizers, Voorhees, 335 pages, 5x8 in.	C 1.40	Nursery Book, The, Bailey, 365 pages, 5x7½ in.
First Book of Farming, The, Goodrich, 259 pages, 5x7½ in.	C 1.10	Nut Culturist, The, Fuller, 289 pages, 5x7½ in.
First Principles of Soil Fertility, Vivian, 265 pages, 5x7½ in.	C 1.10	Onion Book, The, Prize Essays and Other Papers, 36 pages, 7x10 in.
Floriculture, Practical, Henderson, 325 pages, 5x7½ in.	C 1.10	Onion Culture, New, Greiner, 115 pages, 5x7½ in.
Flower Garden, The, Ida D. Bennett, 282 pages, 5x7½ in.	C 1.60	Peach Culture, Fulton, 204 pages, 5x7½ in.
Forage Crops, Other Than Grasses, Shaw, 287 pages, 5x7½ in.	C 1.10	Play and Profit in My Garden, Roe, 349 pages, 5x7½ in.
Forcing Book, The, Bailey, 266 pages, 5x8 in.	C 1.45	Potato Culture, A B C of, Terry, 318 pages, 4¾x6 in.
Forestry, Practical, Fuller, 299 pages	C 1.60	Potato, The, Frazer, 185 pages, 5x7½ in.

NEW BOOKS—Continued

Note—C indicates cloth; P, paper cover.

Propagation of Plants, Fuller, 349 pages, 5x7 1/2 in.	C 1.60
Pruning Book, The, Bailey, 515 pages, 5x7 1/2 in.	C 1.65
Raspberry and Blackberry Culture, New, Littooy, 48 pages, 3 1/2x6 in.	P .40
Rhubarb Culture, The New, Morse, 130 pages, 5x7 1/2 in.	C .50
Rose, The Book of the, Foster-Melliar, 356 pages, 5x7 1/2 in.	C 2.15
Roses and How to Grow Them, 189 pages, 5x7 1/2 in.	C 1.10
Roses and Rose Growing, Kingsley, 163 pages, 6x9 in.	C 2.10
Silos, Ensilage and Silage, Miles, 100 pages, 5x7 1/2 in.	C .60
Small Fruit Culturist, Fuller, 298 pages, 5x7 1/2 in.	C 1.10
Selling Crops and the Silo, Shaw, 366 pages, 5x7 1/2 in.	C 1.60
Spraying Crops, Weed, 136 pages, 5x7 1/2 in.	C .60

A B C and X Y Z of Bee Culture, Root, 536 pages, 6 1/2x9 1/2 in.	C 1.60
Advanced Bee Culture, Hutchinson, 205 pages, 6x9 1/2 in.	C 1.10
Bee Keeper's Guide, The, Cook, 343 pages, 5 1/2x8 in.	C 1.35
Flifty Years Among the Bees, Miller, 343 pages, 5x8 in.	C 1.10

American Standard of Perfection, 331 pages, 5 1/2x8 in.	C \$2.00
Artificial Incubating and Brooding, 96 pages, 9x11 1/2 in.	P .50
Aslatics, The, 96 pages, 9x11 1/2 in.	P .50
Bantam Fowl, The, McGrew, 68 pages, 9x11 1/2 in.	P .50
Beginner in Poultry, The, Valentine, 450 pages.	C 1.60
Capons for Profit, Greiner, 64 pages, 7 1/2x10 in.	P .50
Chick Book, The, 80 pages, 9x11 1/2 in.	P .50
Ducks and Geese, 104 pages, 9x11 1/2 in.	P .75
Egg Farm, The New, Stoddard, 332 pages, 5x7 1/2 in.	C 1.10
Eggs and Egg Farms, 96 pages, 9x11 1/2 in.	P .50
Egg Record and Account Book, P.	P .25
First Lessons in Poultry Keeping, Robinson, 168 pages, 6x9 in.	P .50
Five Hundred Questions and Answers, Darrow, 48 pages, 6x9 in.	P .25
Incubating and Brooding, Artificial, 96 pages, 9x11 1/2 in.	P .50
Leyhorns, The, All Varieties, New Edition, 9x11 1/2 in.	P 1.00
Money in Brollers and Squabs, Boyer, 148 pages, 6x9 in.	P .50

All books postpaid at following prices:

Strawberry Culture, The A B C of, Terry & Root, 235 pages, 5x6 in.	P .50
Strawberry Culturist, The Illustrated, Fuller, 59 pages, 5x7 in.	C .35
Sweet Potato Culture, Fitz, 86 pages, 5x7 1/2 in.	C .55
Ten Acres Enough, 273 pages, 5x7 1/2 in.	C 1.10
Tomato Culture, Littooy, 24 pages, 5x7 1/2 in.	P .25
Tomato Culture, Tracy, 150 pages 5x7 1/2 in.	C .50
Vegetable Gardening, Principles of, Bailey, 458 pages, 5x7 1/2 in.	C 1.60
Vegetable Gardening, Green, 252 pages 5x7 1/2 in.	C 1.10
Violet Culture, Commercial, Galloway, 239 pages, 5x7 in.	C 1.50
Violets, How to Make Money Growing, Saltford, 45 pages, 5x6 1/2 in.	P .30
Water Lilies and How to Grow Them, Conard & Hus, 228 pages, 5x7 1/2 in.	C 1.10
Window Flower Garden, The, Heinrich, 123 pages, 5x7 1/2 in.	C .60

Bee

How to Keep Bees, Comstock, 228 pages, 5x7 1/2 in.	C 1.10
How to Produce Extracted Honey, Root, 29 pages, 4x6 in.	P .20
Modern Queen Rearing, Root, 33 pages, 4x6 in.	P .20

Poultry and Pigeon

Orpington, The, Simpson	P .75
Pheasant Farming, Simpson	P .25
Plymouth Rocks, All Varieties, New Edition	P 1.00
Poultry Craft, Robinson, 271 pages, 6x9 1/2 in.	C 1.50
Poultry Houses and Fixtures, 95 pages, 9x11 1/2 in.	P .50
Poultry Manual, The, Sewell-Tilson, 108 pages, 5x7 1/2 in.	C .60
Poultry Remedies, Reliable, 93 pages, 5 1/2x8 1/2 in.	P .25
Rhode Island Reds, P.	P .75
Successful Poultry Keeping, 176 pages, 9x11 1/4 in.	P 1.00
Two Hundred Eggs a Year Per Hen and How to Get Them, Warren, 96 pages, 6x9 in.	P .50
Turkeys, All Varieties, 80 pages, 9x11 1/2 in.	P .75
Wyandottes, All Varieties, New Edition	P 1.00
Pigeon Book, The Feather's Practical, Long, 168 pages, 5x7 1/2 in.	P .60
Pigeon Querries, 46 pages, 5x7 1/2 in.	P .25
Squabs, Money In, Long & Brinton, 85 pages, 5x7 1/2 in.	P .55

RAFFIA AND REEDS

FOR BASKET MAKING.

Raffia weaving has become very popular. Baskets, jewel boxes, shopping bags, mats, cushions, slippers and hats are but a part of the many useful articles woven.

Raffia. Any shade, the popular colors being red, green, yellow, orange, brown, black, blue and purple. Prices: Natural color, 1/4 lb. packages, 10c; postpaid, 15c; per lb., 25c; postpaid, 50c. Colored Raffia, per package, 10c; postpaid, 12c; per lb., 60c; postpaid, 85c

Reeds. In the weaving of the larger baskets Reeds are used as a frame or foundation, making them firmer and heavier. We have these in five sizes of which the smallest is No. 1, put up in 10c, 15c and 20c packages; 3c extra for postage. By the pound, 90c to \$1.60; add 25c per lb. postage.

We have a valuable little book on Basket Making, only 25c postpaid.

Raffia
Needles

15c
Dozen



Samples showing colors of Raffia and sizes of Reeds sent for 2 cents to cover postage.

FLOWER SEED DEPARTMENT

Choice New and Standard Varieties

FLOWERING plants are enjoyed by everyone, and cut flowers for home use or flowerling plants for garden display can easily be grown; their care is a pleasant and healthful diversion, and for the small expense of time and money nothing will return so much pleasure and profit. If you have any planting problems, if you wish to produce special effects or work out color schemes, write us; we will be glad to assist you in every way possible, and our experience is at your service.

CULTURE.—Cultural directions are printed on the back of nearly all packets. Flowers usually succeed best in a sandy loam, made rich with well rotted manure, which should be made fine and thoroughly mixed with the soil. A soil thus prepared will remain moist and loose, so that flower seeds, which are generally small and delicate, will germinate and grow with vigor.

After the seeds are up they require plenty of air and moisture, but they must not be too wet or they will "damp off." When large enough to transplant, put them in boxes or pots, giving them plenty of room, then when the ground is warm enough to put them outside each plant will have a nice clump of roots, but if they are left in the seed bed and are close together they will be weak and will not thrive.

A common mistake with flower as well as other seeds, is planting too deep. A good rule is to plant the same depth as the thickness of the seed, and always press the soil down firmly, as this helps the seed to secure a firm hold and also retains the moisture.

A hotbed or cold frame is very convenient to start seeds in, as the temperature and moisture can be so regulated as to make their germination and rapid growth more certain. Most seeds do well if sown in boxes in a sunny window in the house.

Plants are usually ready to be transplanted when they have made a growth of two inches.

INFORMATION THAT WILL AID IN SELECTION OF FLOWERS.

Annuals bloom and ripen the first year, and then they perish. Many annuals in warm climates, or when taken in, or protected during winter, become perennial, with short lives.

Biennials do not generally flower the first year, and are in their perfection the second year.

Perennials flower several years in succession.

Hardy Annuals, Biennials and Perennials can be sown in the open ground early in the spring if

desired, and Hardy Biennials and Perennials do not require any protection in winter.

Half-Hardy Annuals, Biennials and Perennials should not be sown in open ground until settled warm weather, though they can be sown in the house, if desired, early, and afterwards transplanted. The two latter need to be protected in winter, or carried over until spring in cold frames or greenhouses.

Asters

As fall-blooming annuals, Asters have no superior, and many of the new varieties rival the chrysanthemum in size and beauty. We offer a select collection of the choicest varieties and all of our seed is fresh from the most expert growers. Asters should have rich soil and abundant moisture. They are half-hardy annuals. Fine Plants in Season, see Plant Department.

Finest New Asters

Lavender Gem

This beautiful new aster of the comet type is an exquisite shade of true lavender, beyond question the finest yet produced. Is free flowering, erect habit, medium early. Every florist should grow this aster.

Pkt., 15c; $\frac{1}{8}$ oz., \$1.00.

Pink Gem

Identical with the lavender type, except in color, which is a lovely bright pink.

Pkt., 15c; $\frac{1}{8}$ oz., \$1.00.

White Gem

A beautiful white aster of the new "Gem" type—same as lavender and pink Gem.

Pkt., 15c; $\frac{1}{8}$ oz., \$1.00.

Hercules White

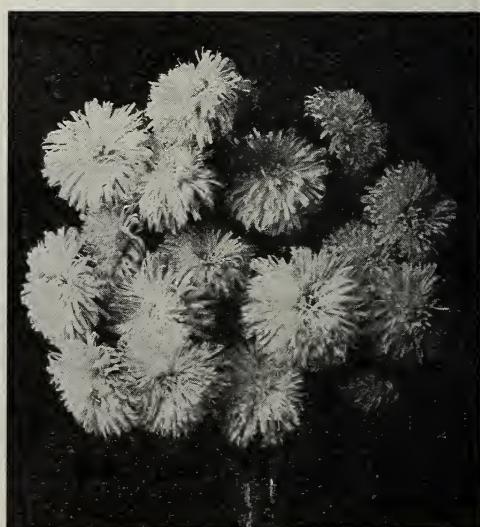
A splendid new half dwarf white, with immense pure white blooms of great beauty. Be sure to give this novelty a trial.

Pkt., 25c; $\frac{1}{8}$ oz., \$2.00.

New "Crego Giant" Aster

The "Giant Crego" is distinct in every way, and its magnificent flowers, often 6 inches in diameter, are fully equal to chrysanthemums. They have rare beauty of form and brilliant coloring, are very vigorous, and free flowering; blooms are borne on long stems. **White, Shell Pink, Rose, Purple,**

Pkt., 15c; $\frac{1}{8}$ oz., \$1.00.



CREGO ASTERS



Annual and Perennial Bedding Plants—Page 65.

ASTERS—Continued

"Mikado"

Another new type of Aster of great merit. A favorite with florists. Has very long, narrow petals, straight at the outside, but toward the center they cross and recross in splendid confusion, giving the bloom a beautiful, fluffy fullness. Mikado is very vigorous, with strong branching habit, producing a blossom on every shoot.

Pink, White, Pkt., 15c; $\frac{1}{8}$ oz., \$1.00.

Daybreak

Flowers are full, large and round, borne freely on long stems. Color a dainty shell pink. Very early. Height, 18 inches. **Pkt., 10c; $\frac{1}{8}$ oz., 75c.**

Purity

Same as Daybreak, excepting color, which is a pure, glistening white. **Pkt., 15c; $\frac{1}{8}$ oz., 75c;**

Imperial Lavender

Of the same type as Daybreak, Purity and Imperial Yellow. Color a lovely light lavender. Up-right, free bloomer. **Pkt., 10c; $\frac{1}{8}$ oz., 75c.**

Imperial Yellow

Handsome flowers of a light lemon yellow; a new color in asters. **Pkt., 10c; $\frac{1}{8}$ oz., 75c.**

Queen of the Market

Best early Aster, of graceful spreading habit. Two weeks ahead of other varieties.

**Color, White, Lt. Blue, Scarlet, Dark Blue.
Pkt., 10c; $\frac{1}{8}$ oz., 40c.**

Chrysanthemum Flowered

Half dwarf; of compact growth; flowers large, abundant and later than many sorts.

**White, Scarlet, Lilac, Rose or Mixed.
Pkt., 10c; $\frac{1}{8}$ oz., \$1.00.**

Giant Comet

One of the handsomest of the tall growing sorts; flowers large and beautiful; petals long and twisted.

**Rose, Crimson, Light Blue, White or Mixed.
Pkt., 10c; $\frac{1}{8}$ oz., 50c.**

Semple's Late Branching

A magnificent strain; flowers large, beautiful, double, and borne on long stems.

**White, Rose, Crimson, Blue or Mixed.
Pkt., 10c; $\frac{1}{8}$ oz., 35c.**

Hardy Perennial Asters

Michaelmas Daises

Handsome flowers of easy culture, that appear at a time when flowers are scarce. A large clump when in bloom is a treat to the eye. Mixed varieties. **Pkt., 10c; Large Flowering Mixed, pkt., 15c.**

ASTER PLANTS

See Plant Department

Acroclinium—Everlasting

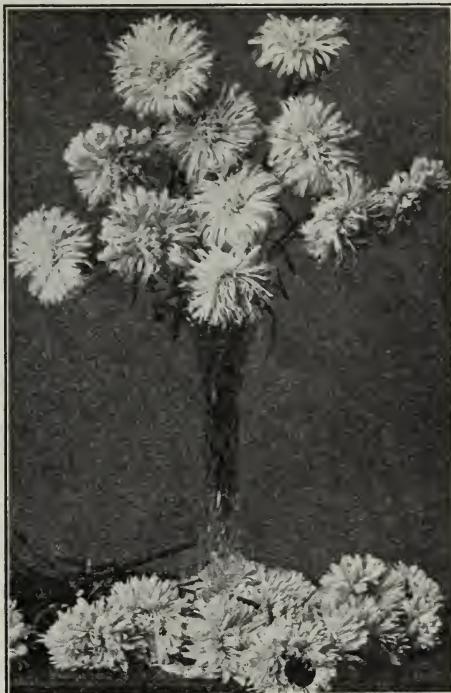
Elegant annual, everlasting, producing beautiful daisy-like flowers, resembling the Rudbeckia. Fine for winter bouquets. Gather them partially opened and dry in the shade. Height ten to fifteen inches.

Mixed, all colors, pkt., 5c.

Ageratum

Fine for bouquets and useful for beds, borders and pot plants. The flowers are graceful tufts of fine petals that remain fresh a long time after being cut. The plant blooms all summer. Half hardy annual six to eighteen inches high. Plants in season.

**Mexicanum Nanum. Light Blue, White or Mixed.
Pkt., 5c; $\frac{1}{8}$ oz., 15c.**

**"COMET" ASTERS****Agrostemma**

Strikingly beautiful for beds, ribbons and borders. Its graceful, pink-like flowers remain fresh a long time after being cut, and are very handsome in bouquets. Thrives in any soil.

**Coronaria. Perennial
Pkt., 5c.**

Ammobium

One of the hardestiest everlastings. The flowers are not large, but beautiful in form, and pure white. Very desirable for winter bouquets. An easily grown annual.

Pkt., 5c.

Alyssum

Every garden should have plenty of Sweet Alyssum; its small, white flowers, borne in great profusion, are delicately fragrant and valuable for cutting; it is a good basket and pot plant, and valuable for carpet bedding. In the border sow thickly so as to make a mass. It is desirable to sow the seeds early in spring or even the previous autumn. Hardy annual. Plants in season.

Maritimum. Sweet. Pkt., 5c; oz., 30c.

Maritimum. Little Gem. Pkt., 5c; oz., 50c.

Procumbens. Of trailing habit; profuse bloomer. **Pkt., 10c; $\frac{1}{8}$ oz., 20c.**

**Saxatile. Perennial. Yellow flowers.
Pkt., 5c; $\frac{1}{8}$ oz., 20c.**

Amarantus

Our warm summers suit admirably the varieties of Amarantus cultivated for ornament. These are plants which are striking on account of their foliage or peculiar mode of bloom.

**Melancholicus Ruber. Deep, red foliage;
dwarf. Pkt., 5c.**

Caudatus. Graceful, drooping flowers. **Pkt., 5c.**

Tricolor, or Joseph's Coat. Foliage scarlet yellow and green. **Pkt., 5c.**



"DIAMOND" LAWN GRASS—Makes an Evergreen Velvet Turf.

Arabis, or Rock Cress

The earliest, prettiest, spring flower. The spreading tufts are covered with a sheet of pure white flowers as soon as the snow disappears. Unequaled for rockeries or edgings; withstands the drought and is always neat.

Alpina.

Pkt.. 5c.

Alpina Grandiflora Superba (new). Pkt., 10c.**Auricula, or Primula Auricula**

Beautiful, spring-blooming flowers. Hardy, perennial. **Finest Mixed** Pkt., 25c.

Asparagus Plumosus, or Asparagus Fern

One of the prettiest house plants. The leaves are bright green, gracefully arched, surpassing Maiden-hair Ferns in grace, delicacy of texture and richness of color. **For plants see Plant Department.**

Pkt., 25c; 25 seeds, 50c.

Asparagus Sprengeri, or Emerald Feather

One of the best of the new so-called ferns. Feathery foliage; useful for bouquets, wreaths or sprays, remaining perfect for weeks after cutting. Grows freely the whole year round. **(For plants see Plant Department)** Pkt., 10c; 25 seeds, 25c.

Bachelor's Button, or Centaurea Cyanus

A hardy annual, easily cultivated. Has recently been greatly improved, and now produces handsome flowers of a great variety of rich colors. Borne on tall, branching stems, with but little foliage. Striking and handsome

Cyanus. Fine single mixed. Pkt., 5c; oz., 25c.**Cyanus.** Fine double mixed. Pkt., 5c; oz., 50c**Cyanus. Alba,** single white. Pkt., 5c; oz., 35c.**Cyanus. Azurea,** single blue. Pkt., 5c; oz., 35c.**Balloon Vine**

A rapid, graceful climber, with inflated seed pods; flowers white. Tender annual.

Pkt., 5c; oz., 25c.

Browallia

Handsome, free flowering annual. Covered all summer with bright, rich blue and white flowers. Worthy of more general cultivation. Eighteen inches high.....

Mixed Pkt., 5c.**Brachycome**

Swan River Daisy. A charming flower in white and blue varieties. The plants grow about twelve inches in height and bloom freely. They make elegant border plants

Choice Mixed, Pkt., 5c.**Balsam**

Exceedingly handsome plants, producing masses of attractive and various colored flowers. Half hardy annual.

Tall Double Camellia Flowered Mixed

Pkt., 5c; ½ oz., 35c.

Dwarf, Double, Mixed Pkt., 5c; ½ oz., 15c.

Begonia

Begonias are among the most beautiful of flowering plants especially adapted to pot culture. Try our select seed; the finest in the world.

Rex. Ornamental leaved varieties; very handsome.**Mixed, Pkt., 25c****International Prize.** Single mixed. Pkt., 25c.**Fringed.** Single mixed. Pkt., 25c.**Gracilis.** Pkt., 15c.**Finest Strain** of double Tuberous Rooted.

Pkt., 25c.

Canna

Ornamental, tropical looking plants of easy culture; large and beautiful flowers. Hardy perennial. For Canna Bulbs, see Plant Department.

Creozy's New Large Flowering Mixed. Pkt., 10c; oz., 35c.

New French and German varieties, mixed Pkt., 10c; oz., 35c.

Canary Bird Flower

Climbing plant with graceful foliage and yellow blossoms. Half-hardy annual.

Pkt., 5c; ¼ oz., 15c.

Candytuft

Candytuft has long been among the most highly prized of garden annuals. The best effect is produced by raising the plants in masses, or sowing the seeds where the plants are to bloom.

Odorata. Sweet scented; white.

Pkt., 5c; oz., 20c.

White Empress. Very sweet and attractive Pkt., 10c; oz., 50c.**Carmine or Purple.** Pkt., 5c; oz., 40c.**Dark Crimson.** Pkt., 5c; oz., 40c.**Mixed.** All colors. Pkt., 5c; oz., 20c.**Sempervirens. Perennial.** White. Pkt., 10c; ½ oz., 25c.**Calliopsis, or Coreopsis**

Very showy and attractive. Always covered with a mass of bright flowers. A fine cut flower.

Choice Mixed Dwarf Annual, Single. Pkt., 5c; ½ oz., 20c.**Choice Mixed Double Annual.** Pkt., 5c; ½ oz., 20c.**Lanceolata.** A perennial, blooming the first year; flowers rich yellow, single; very fine for cutting. Pkt., 10c; ¼ oz., 50**Grandiflora.** Perennial. Mixed. Pkt., 10c; ¼ oz., 25c.**Calceolaria**

Very handsome and much admired. Produces a profusion of beautiful flowers of unique form and colorings. Fine for pot culture.

Hybrida. Finest mixed. Pkt., 50c.**Calla**

Devoniensis. New. A fine calla that will bloom from seed in one year. For Calla Bulbs, see Plant Dept.

Pkt., 15c; 25 seeds 50c.

Aethiopica. The well-known "Lily of the Nile." Pkt., 15c.**Calendula, or Pot Marigold**

The well-known Pot Marigold, valued by Europeans for flavoring soups and stews. Flowers are dried in fall and kept in paper bags for use. In mild climates this plant will bloom nearly all the year round. Plant in early spring in open ground.

Double Mixed, Pkt., 5c; ½ oz., 15c.**Catchfly, or Silene**

A hardy annual, yielding for a long time a profusion of umbels of bright colored flowers. The plant is covered with glutinous moisture, to which flies adhere; hence its name. Fine mixed, all colors.

Pkt. 5c; oz., 25c.

FERNS SPLENDID NEW VARIETIES THAT ARE EASY TO GROW**LOW PRICES SEE PLANT DEPARTMENT**

Carnation

Universally admired, deliciously fragrant. There is no more satisfactory flower to grow and few that are as lasting. The seed we offer is the finest obtainable and our new strains of perpetual flowering carnations will bloom the first year. Fine plants in season, see Plant Department.

Carnation

Chabaud Everblooming. Flowers in five to six months from sowing.

Extra Select, Double White, Red or Yellow.

Pkt., 15c.

Extra Choice Double Mixed.

Pkt., 15c.

Fine. Double Mixed.

Pkt., 10c.

Grenadin. Scarlet; charming double scarlet,

dwarf and compact; very early, free flowering;

especially fine for borders.

Pkt., 15c; $\frac{1}{8}$ oz., 75c.

Margaret Carnations

Bloom in four months from seed. Separate colors, white, yellow, dark red, mixed.

Pkt., 10c; $\frac{1}{8}$ oz., 30c.

American Mixed. New varieties.

Pkt., 25c.

Extra choice.

Canterbury Bells

Very ornamental garden plants of the easiest culture; hardy biennial, two and a half feet high, producing large, nodding and charming bell-shaped flowers of many exquisite shades.

Campanula. Single, mixed.

Pkt., 5c; $\frac{1}{8}$ oz., 20c.

Campanula. Double, mixed.

Pkt., 10c; $\frac{1}{8}$ oz., 50c.

Campanula. Calycanthema (Cup and Saucer)

White or mixed.

Pkt., 5c; $\frac{1}{8}$ oz., 50c.

Persicifolia. Hardy perennial; very fine;

blooms in June. Mixed.

Pkt., 20c.

Diamond Mixture. Finest sorts; all colors,

Pkt., 10c.

Castor Bean, or Ricinus

Highly ornamental, of stately growth and having large leaves of bronze or glossy green; of very easy culture.

Sanguineus. Brilliant scarlet.

Pkt., 5c; oz., 20c.

Zanzibaricensis. Surpasses all in size and beauty of colors. Mixed.

Pkt., 5c; oz., 20c.

Borbonensis Arboreus. The largest variety.

Pkt., 5c; oz., 20c.

Mixed. Best varieties.

Pkt., 5c; oz., 15c.

New Hybrid. Panoramitanus. Dark brown eaves; very decorative.

Pkt., 10c; oz., 50c.

Cosmos

Seed sown in March or April and transplanted to open ground will produce plants three to five feet high by September, which thereafter and until November, will yield hundreds of blossoms three inches across; they are of various shades, from pure white to purplish crimson. Both foliage and flowers are unsurpassed for bouquets and vases. Annual. (Plants in season).

Lady Lenox. A magnificent new type of extraordinary size and rare beauty. Color, a delightful pink. Beautiful under artificial light. The oval petals form a perfectly circular flower which keeps well when cut.

Pkt., 10c; $\frac{1}{8}$ oz., 50c.

Klondyke. Blooms very early and continuously; three to four feet high; flowers large, golden yellow and borne on long stems.

Pkt., 10c; $\frac{1}{8}$ oz., 15c.

Early Dawn. White, slightly tinted pink.

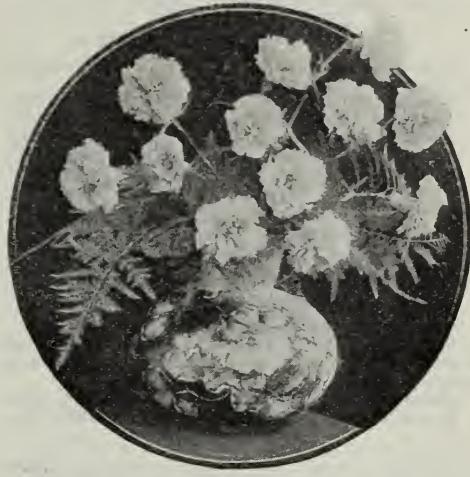
Pkt., 10c; $\frac{1}{8}$ oz., 35c.

Marguerite. New and odd; very pretty, petals fringed. Mixed.

Pkt., 15c; $\frac{1}{8}$ oz., 50c.

Mammoth Flowering. White, pink, red or mixed.

Pkt., 10c; $\frac{1}{8}$ oz., 20c.



Centaurea

Odorata Chameleon. Grown for its handsome, fragrant, yellow and rose flowers; superb.

Pkt., 10c; $\frac{1}{8}$ oz., 50c.

Imperialis. A fine, sweet-scented flowering variety. Hardy annual. All colors mixed.

Pkt., 10c; $\frac{1}{8}$ oz., 25c.

Chrysanthemum

Very showy, effective and desirable as summer flowering plants. Hardy annuals.

Coronaria. Double mixed.

Pkt., 5c.

Frutescens. (Marguerite, or Paris Daisy).

Pkt., 10c.

Carinatum. Single mixed.

Pkt., 5c.

Cineraria

Magnificent and indispensable flowering plants for the window garden. The flowers of white, blue, violet and crimson shades, covering the plant with a sheet of bloom.

Hybrida. Grandiflora, prize mixed. Extra choice.

Pkt., 50c.

Hybrida. Fine mixed.

Pkt., 15c.

Clarkia

Handsome, free flowering annuals of easy cultivation. Produce a fine effect massed in beds. Flowers are very bright and attractive. Double mixed.

Pkt., 5c.

Cianthus Dampieri

A fine pot plant, bearing clusters of curiously shaped and very brilliantly colored flowers, scarlet with black center; tender perennial.

Pkt., 20c.

Celosia, Feathered

Pyr. Plumosa. Mixed colors of great brilliancy.

Pkt., 5c.

Thompsoni Magnifica Feathered. Splendid new class, for pots or open ground, especially fine for market. Mixed.

Pkt., 10c.

Celosia, or Cockscomb

Graceful, free-blooming, half-hardy annuals.

Cristata. Finest varieties. Mixed.

Pkt., 5c.

President Thiers. Dwarf, crimson comb.

Pkt., 10c.

Cobaea Scandens

A handsome, rapid-growing, climbing plant, having large, bell-shaped flowers, beautiful foliage and peculiarly delicate and curious tendrils. (Plants in season).

Purple, Pkt., 10c; $\frac{1}{4}$ oz., 20c; White, Pkt., 10c; $\frac{1}{4}$ oz., 50c.

Columbine, or Aquilegia

Sometimes known as Honeysuckle. Produces handsome flowers; perennial.

Double White.

Coerulea. Hybrid Mixed.

Rose Queen. New.

Coerulea. Fl. Plena. New. Splendid.

Best Double or Single Varieties, Mixed.

Pkt., 5c.

Collinsia

This is an interesting, free-flowering, hardy annual. The flowers are in whorls, handsomely variegated in crimson, purple and white. Mixed.

Pkt., 5c.

Coleus

Probably the best known and most popular of ornamental foliage plants. Leaves all shades and colors. Tender perennial.

Finest Hybrid Mixed.

Extra Mixed (Benary).

Pkt., 15c.

Pkt., 50c.

Cyclamen

Beautiful winter and spring flowering plants for the window and greenhouse. Not only are the flowers of striking beauty, but the foliage is also highly ornamental. The colors range through shades of pink, crimson, white, spotted, etc. Delicately fragrant. Bulbs in season.

Giganteum Hybridum. Mixed. **Pkt., 25c.**

Papilio. Butterfly. Mixed. **Pkt., 50c.**

Cypress Vine, or Ipomoea**Quamoclit**

A climber of rapid growth, having handsome fern-like foliage and a profusion of bright, attractive flowers.

White, scarlet or mixed. **Pkt., 5c; $\frac{1}{4}$ oz., 15c.**



DAHLIAS—See Plant Department

Dracaena

Ornamental greenhouse plant. Very desirable.

Indivisa Lineata. Narrow, dark foliage.

Pkt., 10c.

Daisy, or Bellis Perennis

A well known and popular, low-growing plant bearing beautiful flowers. Hardy perennial.

Longfellow. Double red.

Pkt., 15c; $\frac{1}{4}$ oz., 40c.

Double White or Mixed.

Pkt., 15c; $\frac{1}{4}$ oz., 40c.

Burbank's New Shasta. Very hardy; profuse bloomers; flowers very large and borne on long stems; single; petals pure, glistening white; center dark.

Pkt., 15c.

Datura

Large, strong-growing plants, trumpet-shaped flowers, white, sometimes tinted with blue. Roots can be preserved in the cellar, like Dahlias.

Fastuosa Huberiana. Double mixed. **Pkt., 5c.**

Euphorbia

Fine, ornamental, foliage plants. Hardy annual.

Variegata. Variegated foliage.

Pkt., 5c.

Eschscholtzia, or California Poppy

These are among our most beautiful and popular annuals, being of the easiest culture and giving great satisfaction. They commence to bloom within a few week's time from spring-sown seed and continue to flower profusely until late in the autumn, forming nice, bushy plants, one foot high.

Californica. Single yellow, white or mixed.

Pkt., 5c; oz., 35c.

Carmine.

Pkt., 5c; oz., 50c.

Mandarin. Inner side of petals rich orange, outer side brilliant scarlet; very striking; single.

Pkt., 5c; oz., 35c.

Californica. Double mixed.

Pkt., 10c; $\frac{1}{2}$ oz., \$1.00.

(For other sorts see Poppies).

Echinocystis, Lobata or Wild Cucumber

A rapid-growing climber. Very good for covering old fences or trellises. Hardy annual.

Pkt., 10c; oz., 25c.

Fox Glove, or Digitalis

A tall growing biennial, with large leaves and spikes of vari-colored and spotted flowers. A magnificent plant. Fine for borders or background. Easily grown. Fine mixed or white.

Pkt., 5c; $\frac{1}{4}$ oz., 15c.

Four O'clock or Mirabilis**Marvel of Peru**

A hardy annual, growing luxuriantly in any ordinary soil, and bearing a profusion of bright, handsome flowers of various colors, shades and markings. Flowers open at four o'clock, close in the morning.

Choice Mixed.

Pkt., 5c; oz., 15c.

DAHLIA

A magnificent, fall-blooming tuberous-rooted plant, which can be readily started from seed.

For Dahila Roots, see Plant Department.

Pkt., 10c.

Single mixed.

Pkt., 10c.

Cactus. New; flowers odd and fantastic in shape; all colors.

Single mixed.

Pkt., 10c.

Double mixed.

Pkt., 20c.

Twentieth Century. New single Dahlias of recent introduction; flowers large and handsome.

Pkt., 10c.

New semi-double Giant Peony-flowered.

Pkt., 20c.

GERANIUM

A half-hardy perennial, easily and quickly grown from seed.

Zonale. Extra choice, single mixed, large flowering. This is the well known bedding Geranium.

Pkt., 10c.

Zonale. Very finest and newest sorts. Choice mixed. Double.

Pkt., 25c.

Lady Washington. Foliage green; flowers large, handsome, oddly marked, fine for pot culture. Finest mixed.

Pkt., 25c.

For finest true to name Geraniums. See plant department. We deliver them postage free, fine well rooted plants.

Gentiana

Fine, showy flowers. Should be in every flower garden. Hardy.

Pkt., 10c.

Geum

Chilense.

Hardy perennial. Free-blooming plants. Fine for bouquets.

Pkt., 5c.

Scarlet. Double.

Globe Amaranth or Gomphrena

An old favorite, everlasting flower. Mixed.

Pkt., 5c.

Gypsophila, or Baby's Breath

A pretty, free-flowering plant. Fine for bouquets.

Paniculata. Foliage fine; covered with tiny, pure white flowers. Hardy, perennial. Pkt., 5c.

Repens. Dwarf White, for Rock-work.

Pkt. 10c.

Gaillardia

Exceedingly beautiful, half-hardy perennial, making very showy plants, one to two feet high, for the flower garden. Grown in masses they are especially effective; large flowers, two to three inches across, produced from early summer until frost; unrivaled for cutting.

Picta. Large, handsome, mixed flowers. Hardy annual.

Pkt., 10c; ¼ oz., 15c.

Picta Lorenziana. Double; finest mixed; annual.

Pkt., 10c; ¼ oz., 25c.

Mixed. Many shades of yellow, orange, and scarlet.

Pkt., 10c; ¼ oz., 15c.

Grandiflora Maxima. Perennial. Golden.

Pkt., 10c; ¼ oz., 25c.

Gourds

Of rapid growth, and bearing curious fruits of various sorts.

Dipper, bottle, egg-shaped. Pkt., 5c; oz., 25c.

Large varieties. Mixed. Pkt., 5c; oz., 25c.

Small varieties. Mixed. Pkt., 5c; oz., 25c.

DIAMOND PLANT FOOD

Is clean and
odorless
A 25c package
will feed a dozen
large plants a
whole year.
See page 47



FORGET-ME-NOT.

Forget-me-not, or Myosotis

Beautiful spring favorites, of easy growth, bearing clusters of lovely, small flowers. They are perennials and are hardy enough to remain in the open ground except in very cold latitudes. Fine for borders.

Alpestris. Of trailing habit, with pretty flowers. Blue or mixed.

Pkt., 10c.

Semperflorens. Dwarf; continuous bloomer; blue.

Pkt., 10c.

Victoria. Flowers large, bright. azure blue; fine for borders and pots.

Pkt., 10c.

Gilia

Gilias are free-flowering, hardy annuals, one foot high, with finely cut foliage and clusters of small, delicate flowers, white, lilac, and rose color; desirable for cutting and suitable for beds, rockwork and edgings.

Mixed.

Pkt., 5c.

Gloxinia

Most charming, greenhouse plants of dwarf habit. Their flowers are produced in greatest profusion, and of the most exquisite and gorgeous colors, many of which are magnificently spotted, mottled and blended. Under the commonest culture they bloom continuously for months.

Hybrida Grandiflora. Splendid mixture of finest varieties, mixed.

Pkt., 25c.

Robusta. Erect, hardy, superb mixture.

Pkt., 25c.

Grevillea, Robusta

The Silk Oak. Very beautiful and graceful foliage plant.

Pkt., 10c.

Godetia

The Godetias are profuse and constant bloomers, and their delicate tints of crimson, rose and white render them very attractive. Hardy annuals.

Semi-Dwarf. Fine mixed.

Pkt., 5c.

Gloriosa. Lord Roberts. Dark red, compact, fine.

Pkt., 10c.

Heliotrope

Delightfully fragrant, free-blooming, tender, perennial plants. Splendid for bedding or pot culture. One foot high of spreading habit. The fragrance of its flowers can not be excelled in exquisite delicacy. Invaluable for bouquets.

Mixed. Choice.

Pkt., 10c.

Mammoth flowered. Blue, white or mixed, very fine.

Pkt., 15c.



Hollyhock, or Althaea

THE modern Hollyhock is quite different and much more beautiful than the plant of twenty years ago, being much more compact in growth; the flowers are larger, richer colored, and the double varieties are fuller and of better form. For a background to a flower garden there can be nothing better. Hardy perennials; five feet high.

CHATERS. Superb strain, varieties of greatest perfection.

DOUBLE. White, crimson, pink, yellow, salmon and lilac. **Pkt., 10c; $\frac{1}{2}$ oz., 60c**

MIXED. All double varieties. **Pkt., 10c; $\frac{1}{2}$ oz., 50c**

ALLEGHENY. A popular variety with very large flowers, petals beautifully fringed and crinkled, coloring rich and attractive.

Double Choice Mixed. **Pkt., 10c; $\frac{1}{2}$ oz., 30c.**

Helichrysum

Everlasting flower. One of the best for winter bouquets. Hardy annual. **White, yellow and crimson.** Double mixed. **Pkt., 5c.**

Hibiscus

Strong-growing plants of very easy culture and exceedingly showy. Has large, cup-shaped flowers. Hardy annual. Extra mixed. **Pkt., 5c.**

Hunnemannia, or Giant Yellow Tulip Poppy

Fumariaefolia. Best of the poppy family for cutting, remaining in good condition for several days. Seed sown early in May will by the middle of July, produce plants covered with their large buttercup-yellow, poppy-like blossoms, and never out of flower until hard frost. **Pkt., 10c.**

Hyacinth Bean, or Dolichos

Rapid growing, ornamental, climbing annuals, bearing clusters of beautiful purple and white flowers, followed by highly ornamental seed pods. Mixed. **Pkt., 5c; oz., 15c.**

Ice Plant

Pretty summer trailing annual for vases and rock work; leaves covered with ice-like drops.

Pkt., 5c; oz., 35c.

Kochia Trichophylla—Summer Cypress or Fire Bush.

Annual forms highly decorative bushes, foliage green, turning to fiery red in autumn. **Pkt., 10c.**

Lantana

A free-flowering shrubby plant, suitable for outdoor or pot culture. The flowers emit an agreeable odor and are of many shades of purple, orange and white. Half-hardy perennial.

Hybrida Fine Mixed. **Pkt., 10c; oz., 25c.**

Leontopodium Alpinum—Edelweiss

Hardy perennial, very curious flowers. **Pkt., 25c.**

Lupin, or Lupinus

Very desirable shrubby plants, bearing long spikes of various colored flowers.

Annual Mixed. **Pkt., 5c; oz., 20c.**

Perennial Mixed. **Pkt., 5c; oz., 25c.**

Mignonette

A quick-growing annual, highly esteemed for its delicate fragrance. It grows most rapidly and produces the largest and finest spikes of blossoms during cool, moist weather of early spring and late fall months, but will flower freely throughout the summer from seed sown early in spring. A second planting should be made about the first of August to furnish large, fine spikes of flowers during the cool fall months.

ODORATA GRANDIFLORA. Large, well-formed, fragrant flowers. **Pkt., 5c; oz., 25c.**

ALLAN'S DEFIA. A choice strain for forcing. Spikes of enormous size and intensely rich perfume. One of the most desirable for open ground. **Pkt., 10c; oz., 50c.**

MACHET. **White Pearl.** Splendid new variety, best white.

Pkt., 15c; $\frac{1}{2}$ oz., \$1.00.

New Annual Hollyhocks**Hybrida Semperflorens.**

This splendid variety will bloom in August, from spring planting, continuing until frost. This is a great advantage, as other varieties do not bloom until the second year. Try them.

Finest new single or double mixed. **Pkt., 10c.**

Larkspur, or Delphinium

A very ornamental class of profuse blooming plants. Their tall spikes of many colored flowers produce a striking effect when planted in groups. Hardy annual.

Dwarf Rocket. Finest colors. Double mixed. **Pkt., 5c; $\frac{1}{2}$ oz., 20c.**

Tall Rocket. Finest colors. Double. **Pkt., 5c., $\frac{1}{2}$ oz., 20c.**

Perennial Mixed. Single. **Pkt., 5c; $\frac{1}{2}$ oz., 20c.**

Stock Flowered or Tall Branching. Finest double mixed. **Pkt., 10c; $\frac{1}{2}$ oz., 25c.**

Chinese Azureum. Single blue, fine for cutting. **Pkt., 10c; $\frac{1}{2}$ oz., 30c.**

Linum, or Crimson Flax

Beautiful and effective; hardy, about 18 inches high; covered with bright, scarlet flowers.

Annual. **Pkt., 5c; oz., 35c.**

Perennial. **Mixed.** **Pkt., 5c; oz., 35c.**

Lobelia

Delicate, low growing, annual plants of the greatest value for borders, ribbons, edgings, rockwork and hanging baskets.

HYBRID. HAMBURGIA. New; light blue with white eye, long drooping flower stalks; fine for hanging baskets or boxes; grows rapidly. **Pkt., 10c.**

GRACILIS. Blue, trailing; beautiful for baskets. **Pkt., 10c; $\frac{1}{2}$ oz., 25c.**

CRYSTAL PALACE COMPACTA. Plant dwarf; flowers very fine and rich, deep blue; finest for bedding and edging. **Pkt., 10c; $\frac{1}{2}$ oz., 50c.**

COMPACTA. Finest mixed. **Pkt., 10c; $\frac{1}{2}$ oz., 50c.**

COMPACTA EMPEROR WILLIAM. **Pkt., 10c. $\frac{1}{2}$ oz., 40c.**

WHITE LADY. New white flowering. **Pkt., 10c; $\frac{1}{2}$ oz., 50c.**

CARDINALIS, PERENNIAL. Taller than other sorts, flowers rich red. **Pkt., 10c.**

Lychnis

There are few plants that produce more brilliantly colored blossoms than Lychnis. They are borne in clusters and continue fresh and brilliant for a long time. Hardy perennials one to three feet high.

HAAGEANA HYBRIDA. Mixed. **Pkt., 10c; $\frac{1}{2}$ oz., 25c.**

Pkt., 10c; $\frac{1}{2}$ oz., 50c

PARSON'S WHITE. Flowers almost pure white; very fine. **Pkt., 10c; oz., 50c.**

GOLDEN QUEEN. Dense, Dwarf growth; flowers golden yellow; deliciously fragrant. **Pkt., 10c; oz., 50c.**

Pkt., 10c; $\frac{1}{2}$ oz., 50c

Mimosa, or Sensitive Plant

Pudica. Very curious and interesting plant; its leaves closing if touched or shaken. Annual.

Pkt., 5c.

Morning Glory

The tall varieties are popular, well known, rapid growing climbers of the easiest cultivation. Very fine for covering arbors, trellises, porches, etc. The Minor, or Dwarf varieties flower very freely and do not require support.

Convolvulus Major. Tall, choice single, mixed-all colors.

Pkt., 5c; oz., 15c.

Double Mixed Tall. Pkt., 10c; oz., 25c.

Convolvulus Minor. Dwarf mixed.

Pkt., 5c; oz., 25c.

Imperial Japanese Fringed. These have very large fringed flowers in a great variety of the most exquisite colorings; handsome, variegated foliage. Mixed.

Pkt., 10c; oz., 25c.

Japanese Double Mixed. This double Japanese sort is very fine in leaf, flower and growth.

Pkt., 25c; oz., \$1.00.

Moon Flower, or Ipomoea Mexicana Grandiflora

Rapid growing climber belonging to the Morning Glory family. The flowers are large, waxy white and very showy.

Pkt., 10c; $\frac{1}{4}$ oz., 20c.

Marigold, or Tagetes

The French and African Marigolds are valuable for their flowers in summer, and can be grown to advantage in little clumps with other plants in the front of shrubberies or in the garden border. Color of Flowers, yellow, red, brown and variegated.

The African varieties are the taller in growth, and produce large, self-colored blossoms. The French varieties are smaller, some of them being elegantly striped and spotted.

African Tall or dwarf, double mixed

Pkt., 5c; oz., 40c.

French Tall or dwarf, double mixed.

Pkt., 5c; oz., 35c.

Mimulus

Moschatus, or Musk Plant. Cultivated for its rich, musky odor. Should have a rich soil and ample moisture. Hardy perennial.

Pkt., 10c.

Tigrinus Nanus, or Monkey Flower. Mixed, beautifully spotted, all colors

Pkt., 10c.

Nicotiana

A very showy plant, producing star-shaped flowers of delicious perfume. Taken up in the fall, cut back and potted, will bloom freely all winter. Half hardy annual, three feet high.

Affinis. White. Pkt., 5c; $\frac{1}{4}$ oz., 25c.

Hybrida. Splendid mixed. Pkt., 10c; $\frac{1}{4}$ oz., 50c.

Sylvestris. Pure white, fragrant, drooping flowers, deep green foliage.

Pkt., 5c.

Sanderae. Resembles the Affinis, but unlike that variety does not close up in the daytime. The plant is literally covered with carmin-red, fragrant flowers.

Pkt., 15c.

OUR ROSES HAVE DONE BEST

Gentlemen: We received the package of bulbs you sent us and they were just grand. Many thanks for them. We were surprised to get so many. We have always had fine success with your seeds and roses and will send an order soon for more seeds and shrubs. Your roses have done better than any we have had and we have had a good many.

Thanking you again with our best wishes, we are

MR. and MRS. W. R. VAUGHN.

Nemophila (Love Grove)

Hardy annuals of neat, dwarf, compact growth; fine for borders, pot culture or rockeries. Flowers blotted and beautiful. Mixed varieties. Pkt., 5c.

Nigella

Love-In-a-Mist, or Devil-In-the-Bush. Compact growing, free flowering plants, with curious looking, showy flowers and finely cut foliage. Hardy annuals. Mixed.

Pkt., 5c.

Damascena (Miss Jekyll.) Finest double blue flowers, with fern-like foliage.

Pkt., 10c.

Passion Flower or Passiflora

Most interesting and well-known climbers, bearing singularly beautiful flowers.

Mixed.

Pkt., 10c.

Pampas Grass or Gynerium Argenteum

A noble ornamental grass, easily grown from seed, producing majestic plumes that are invaluable for winter decorations. See Plant Dept. Pkt., 5c.

Pentstemon

Beautiful, hardy, perennial, herbaceous plants with extremely brilliant blooms. Their bell-shaped flowers are borne on long spikes, and are produced abundantly all summer. Mixed.

Pkt., 5c; $\frac{1}{4}$ oz., 75c.

Perilla Nankinensis

Dark purple foliage plant. Half-hardy annual.

Pkt., 5c.

Pueraria Thunbergia—Kudzu Vine.

Beautiful Japan climber, hardy perennial with fragrant purplish-violet, wistaria-like flowers.

Pkt., 10c.

Phlox Drummondii

The blooms of Phlox Drummondii are unrivaled for richness and beauty of color, ranging from white to the deepest scarlet and purple. They are abundant, almost covering the foliage and of long duration. Very desirable, and easily grown. For cutting for bouquets or for bedding in masses they are unsurpassed. Hardy annual, one foot high.

Choice Mixed.

Pkt., 5c; $\frac{1}{4}$ oz., 50c.

Large Flowering. Mixed flowers large and brilliant.

Pkt., 5c; $\frac{1}{4}$ oz., 60c.

Large Flowering. Scarlet or white.

Pkt., 5c; $\frac{1}{4}$ oz., 75c.

Dwarf. Mixed; finest flowering sorts.

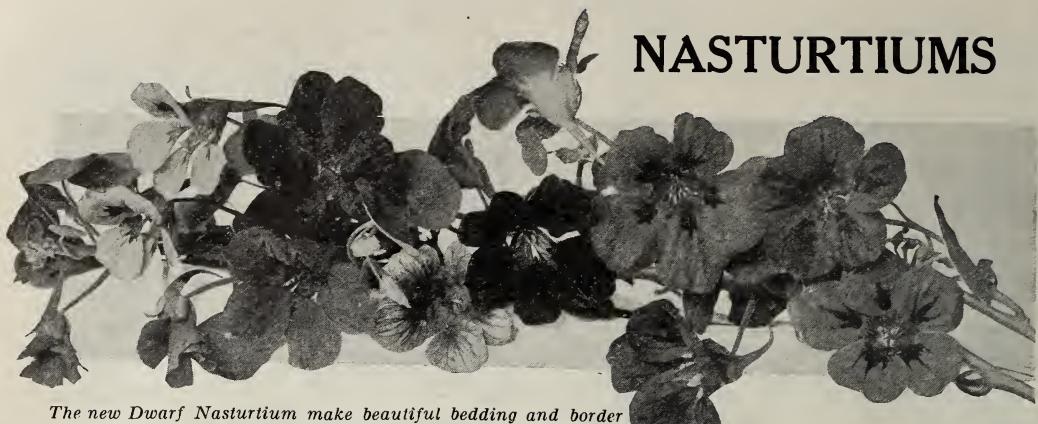
Pkt., 10c; $\frac{1}{4}$ oz., 50c.

Star Phlox (Cuspidata). Flowers have a distinctive star-like appearance, with white margins, excellent for bouquets.

Pkt., 10c; $\frac{1}{4}$ oz., 60c.

For Perennial Phlox, See page 58.

NASTURTIUMS



The new Dwarf Nasturtium make beautiful bedding and border plants and are covered with bloom until late autumn.

NASTURTIUMS are hardy annuals, of easy cultivation and flower best where the soil is not too rich. The new hybrids include various shades of rose, salmon, bright red, pale yellow, etc., either self-colored or spotted, mottled, striped and margined.

For covering trellises, fences, arbors, piazzas, trailing from vases, over rockwork, for bedding, etc., nothing can equal the gorgeous effect produced by their marvelous wealth of bloom, borne in uninterrupted splendor from early summer until cut down by frost. The seeds, pickled green and pickled in vinegar, have a piquant, appetizing flavor that is a valuable addition to relishes or pickles.

NASTURTIUMS—Tall

COQUETTE—Variable flowers marked and blotched in many brilliant colors.

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; lb., \$1.00.

KING THEODORE—Large velvety crimson flowers, very attractive dark green leaves.

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; lb., \$1.00.

MOONLIGHT—Soft primrose. Pkt. 5c; oz. 15c;

$\frac{1}{4}$ lb., 40c.

SUNLIGHT—Large bright golden yellow flowers.

Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 40c.

PRINCE HENRY—Fine lemon yellow, clear carmine blotches.

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; lb., \$1.00.

TWILIGHT—Extra large light salmon, suffused rosy salmon. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 40c.

MIXTURE of standard tall varieties.

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 70c.

NASTURTIUMS—Dwarf

CHAMELEON—Variable colorings in bronze, crimson and yellow, rich markings

Pkt., 5c; oz., 20c; $\frac{1}{4}$ lb., 60c.

CLOTH OF GOLD—Brilliant scarlet, golden yellow leaves

Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 50c

EMPEROR OF INDIA—Intense scarlet, purplish green leaves.

Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 50c.

PRINCE HENRY—Lemon yellow with carmine blotches.

Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 50c.

RUBY KING—Ruby red.

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c.

VESUVIUS—A rich salmon orange, dark foliage.

Pkt., 5c; oz., 20c; $\frac{1}{4}$ lb., 60c.

MIXTURE of standard varieties.

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c.

FROM THE FAR NORTH

Gentlemen: I wish to thank you for the quality of the seeds and bulbs sent me last Spring and for the exacting manner in which you followed my instructions as to shipping same, for they arrived over the "snow trail" in perfect condition.

I believe my Catalog is the only one in this town and it is on the move constantly and is loaned out now so I have to send this order without the "guide."

I may say that my pansy bed of plants grown from your "Mastodon" seed surpasses anything in Alaska for size and the number of blossoms.

Fairbanks, Alaska, Aug. 19, 1912.



OUR 64-PAGE NURSERY CATALOG of Fruit and Ornamental Trees and Shrubs sent Free on request. Ask for It.



For Newest
SWEET PEAS
See page 60

PANSIES

OUR Pansy Seeds are imported direct from the leading pansy specialists of Europe and are the best selections from the new and improved standard types, being absolutely the finest seed obtainable. It was from these that our new Mastodon Strain was developed and we urge growers to take advantage of this opportunity to secure seed.

For early outdoor bedding, seed should be sown in the early fall, in rich, moist garden soil or in cold frames. Spring sowings should be made early.

MASTODON PANSY PLANTS

From February to June

We offer Our Famous Mastodon Pansy Plants packed in baskets of 1 doz. each.

SEE PLANT DEPARTMENT

Mastodon Pansies

FOR years the Steele Pansy Gardens have grown our Giant Pansies and co-operated in securing the finest strains from the world's most celebrated growers. These have been carefully reselected and bred up to their present surpassing excellence, and for giant size, substance, form and coloring we have never seen Pansies to compare with them. Named varieties and special strains are grown separately and the seed collected by hand and carefully blended into what we believe to be the finest mixture ever offered. This is the first opportunity to secure **Mastodon Pansy Seed, Diamond Mixed**, and as only a small amount will be offered, you must order now.

Pkt., 25c; Trade Pkt., \$1.00.

Our Gold Medal Collection Giant Pansies

One Pkt. each of the 10 Varieties, \$1.00.

ADONIS.—A distinct and beautiful shade of light blue with white center and dark blotch, a most pleasing and attractive variety. Illustrated in colors, page 68

Pkt., 10c.

BRIDESMAID.—A beautiful clear white with shining rose colored blotch, a rare and desirable new pansy of the largest size.

Pkt., 15c.

FIRE KING.—Lower petals margined white, with large magenta blotch that has a yellow margin; upper petals bright reddish bronze.

Pkt., 10c.

GOLDEN QUEEN.—A rich pure yellow of the grandest form and size. A valuable addition to the yellows, which are very hard to produce in the Giant strains.

Pkt., 10c.

GIANT DARK BLUE.—A splendid blue black, very elegant, and of good substance; should be grown by everyone.

Pkt., 10c.

Popular Large Flowering Pansies

EMPEROR WILLIAM.—A dainty cornflower blue, very showy; a splendid variety of large size and good substance.

Pkt., 10c.

KING OF THE BLACKS (Giant).—Immense velvety black flowers of the finest quality; the largest and best black pansy.

Pkt., 10c.

TRIMARDEAU GIANTS.—Of remarkably large size and robust growth; very fine.

White, Yellow, Striped, Black, Blue or Mixed.

Pkt., 10c; $\frac{1}{4}$ oz., 60c; oz., \$2.00.

GIANT STRIPED.—A superior strain of truly giant pansies, with the most beautiful striped markings in the richest dark shades. Very popular in Europe.

Pkt., 10c.

MADAME PERRET.—A beautiful and distinct type with edges of petals frilled-bordered white, colors are dark wine—pink and red, beautifully veined. The earliest of the Giants, has sweetest perfume and keeps up its size of flower longer than any other. We offer the best strain.

Pkt., 15c.

RUBY KING.—Rich shades of red, a superb variety, of fine form and substance.

Pkt., 15c.

SNOW FLAKE.—A grand pure white, of extra fine quality.

Pkt., 10c.

VULCAN.—A magnificent new dark glowing red with five large black spots; blooms of perfect form and great substance, but its chief value lies in the superb coloring which has never been attained before. Be sure to try "Vulcan."

Pkt., 25c.

MASTERPIECE — GIANT RUFFLED.—The mammoth size, richness and beauty of colorings and frilled or ruffled character of the petals, make Masterpiece one of the most distinct and interesting Pansies ever developed.

Pkt., 25c.

PRINCE BISMARCK.—Light brown shades with black eye; very beautiful and distinct true giant variety.

Pkt., 10c.

PRINCE HENRY.—A new giant variety, of a brilliant, dark indigo blue, with violet luster, each petal having a large dark brown, veined blotch. Edges of petals slightly ruffled.

Pkt., 15c.

PANSIES—Continued**Fancy Strains of Mixed Pansies****Elite Large Flowering Mixed**

No pains are spared by our German grower to make this strain absolute perfection in form, firmness of texture, size, freedom of bloom, and elegance and variety of markings and colorings. There is no mixed Pansy seed offered superior to this.

Pkt., 25c.

BUGNOT.—Flowers of enormous size, blotched and veined; the shadings comprise tints of red bronze and brown not found in any other mixture.

Pkt., 25c.

ODIER OR BLOTTCHED.—Superb, large flowers, beautifully blotched with rich and varied colors. Extra mixed.

Pkt., 25c.

PARISIAN, LARGEST SPOTTED.—New, very large flowering; very handsome.

Pkt., 25c.

CASSIER.—A very fine mixture; flowers large and marked with three or five blotches.

Pkt., 25c.

FINE MIXED.—A fine assortment of colors.

Pkt., 5c.

Petunia, Hybrida

TOO much can not be said in praise of the Petunia as a bedding plant. Our clear, bright summers seem to bring out its best qualities. During the whole season it is covered with large, showy blossoms, which are always bright and fresh, in spite of heat and drought. The flowers are of an almost infinite variety of colors and markings, and quite as varied in form; large and small, fringed and plain, double and single. Hardy annual. Large assortment.

Single Fine Mixed Pkt., 5c; $\frac{1}{8}$ oz., 25c.

Single Choicest Mixed. Saved from the best flowers. Pkt., 10c; $\frac{1}{8}$ oz., 50c.

Single Fringed Mixed. Large flowered; very desirable. Pkt., 25c.

Pink or Dianthus

The Dianthus family embraces some of the finest of all flowering plants. The blooms are of the richest and most pleasing colors, and nothing can surpass the exquisite fragrance of some varieties. They are hardy, and become perennial in warm climates. **Hedewigii Lacinatus.** Fine, single and double' double fringed, finest assorted colors.

Pkt., 10c; $\frac{1}{4}$ oz., 50c.

Hedewigii Diadematus. Double Diadem Pink. Extra fine. Pkt., 5c; $\frac{1}{4}$ oz., 35c.

Hedewigii Fireball. Extra double, brilliant dark scarlet. Very beautiful.

Pkt., 10c; $\frac{1}{4}$ oz., 75c.

Lacinatus Alba Piena, Snowdrift. Handsome double white. Pkt., 10c; $\frac{1}{4}$ oz., 50c.

Chinensis. Single mixed Pkt., 5c; $\frac{1}{4}$ oz., 15c.

Chinensis. Double mixed. Pkt., 5c; $\frac{1}{4}$ oz., 25c.

Hedewigii. Color varies from richest velvety crimson to delicate rose. Single mixed.

Pkt., 5c; $\frac{1}{4}$ oz., 50c.

Hedewigii. Double mixed large flowering, splendid. Pkt., 10c; oz., 75c.

Poppy, or Papaver

The poppy is well-known and really a magnificent flower which is borne separately on tall stalks. Poppies are very showy and come in many bright and charming colors. Some are hardy annuals, others are perennials, and may be sown as the ground can be prepared.

Double Carnation Flowered. Fringed; colors are dazzling. Mixed. Pkt., 5c; oz., 25c.

Shirley. The range of color, extending from white through delicate shades of pink, rose and carmine, to deepest crimson; fine for cutting. Best single mixed.

Pkt., 10c; $\frac{1}{2}$ oz., 25c.

Iceland, or Nudicaule. These are of a very graceful, neat habit, with bright green, fern-like foliage, formed in tufts, from which issue slender stalks about 12 inches in height, bearing yellow, white or orange-scarlet flowers in endless profusion and most useful for cutting; hardy perennial. Mixed colors.

Pkt., 10c; oz., 25c.

Miss Sherwood. Petals satiny white, shading to chamois rose. Very beautiful and distinct.

Pkt. 10c; oz., 25c.

Double Scarlet or White. Pkt., 5c; oz., 25c.

Double American Flag. White bordered with scarlet. Pkt., 5c; oz., 30c.

Umbrosum. Rich vermillion, with a glossy black spot on each petal; single. Pkt., 5c; oz., 30c.

Bracteatum. Hardy perennial; very showy red.

Pkt., 5c; $\frac{1}{4}$ oz., 20c.

California Poppy. See Eschscholtzia, page 52.

ODIER OR BLOTTCHED.—Superb, large flowers, beautifully blotched with rich and varied colors. Extra mixed.

Pkt., 25c.

PARISIAN, LARGEST SPOTTED.—New, very large flowering; very handsome.

Pkt., 25c.

CASSIER.—A very fine mixture; flowers large and marked with three or five blotches.

Pkt., 25c.

FINE MIXED.—A fine assortment of colors.

Pkt., 5c.

Double Choicest Mixed. Full and handsome.

Pkt., 25c.

Double Fringed Mixed.

Pkt., 25c.

GIANT CALIFORNIA—Extra Select. Blotched and striped, fringed and ruffled. Mixed. Pkt., 25c.

Portulaca, or Rose Moss

Brilliant dwarf annuals, only six inches high, luxuriating in warm situations, and blooming profusely from early summer to autumn. For low beds and masses of color from spring until frost, they are indispensable; colors range through innumerable shades of red, yellow, pink, striped, white, etc.

Single Mixed. Pkt., 5c; $\frac{1}{4}$ oz., 25c.

Double Mixed. Pkt., 10c; $\frac{1}{4}$ oz., 25c.

Phormium, or New Zealand Flax

Tenax. Has handsome, variegated foliage.

Pkt., 10c; $\frac{1}{4}$ oz., 50c.**Pyrethrum**

Very ornamental plants, for both foliage and flowers.

Parthenium Aureum, or Golden Feather. Beautiful, gold leaved, flower white. Pkt., 10c.

Selaginoides. Fine, fern-leaved sort; flowers bright, golden yellow. Pkt., 10c.

**Phlox Decussata—Perennial**

Hardy, perennial; mixed. Pkt., 10c; $\frac{1}{8}$ oz., 50c.

For **Phlox Drummondii** see page 55.

Perennial Phlox—Plants

Newest and best varieties, fine large clumps. See plant department. \$1.50 doz.



Primula, or Primrose

The first three varieties named below are hardy, early blooming garden plants, and the others beautiful, winter blooming house plants. Their various forms and blending of colors are exceedingly pleasing and effective. They thrive best in a sandy loam and leaf mold.

Polyanthus. Early blooming, dwarf growing plants. Valuable for outdoor bedding. Mixed colors.

Pkt., 10c; $\frac{1}{8}$ oz., \$1.00.

Vulgaris. Yellow, common, English Primrose.

Pkt., 10c; $\frac{1}{8}$ oz., \$1.00.

Japonica, or Japanese Primrose. The beautiful large various colored flowers stand in whorls, pyramidically arranged on short flower stems; one foot high; though perennial, new plants flower more freely, and seed should be sown every year. Mixed varieties.

Pkt., 15c; $\frac{1}{8}$ oz., \$1.00

Sinensis, or Chinese Primrose. The beautiful large fringed flowers stand in pyramids arranged on short flower stems. Blossoms of every shade of color, from pure white to deep crimson, and even deep blue; especially fine for winter and spring flowers in the house; easily grown; free bloomers.

Finest mixed. **Pkt., 25c; 1-32 oz., \$2.00**

Sinensis. Pure white or red **Pkt., 25c.**

Sinensis, Alba. New; finest large white, with yellow eyes. **Pkt., 50c.**

Sinensis. Double finest mixed. **Pkt., 50c.**

Obconica Grandiflora. A lovely profuse bloomer, bearing beautiful single flowers. This is really an ever-blooming plant, producing elegant clusters of flowers continuously throughout the year.

Pkt., 10c; $\frac{1}{8}$ oz., \$1.50.

Primrose, Evening, or Oenothera

The Oenothera, or Evening Primrose, produces large, showy blossoms, which are fully expanded only during the evening and early in the morning. The flowers, which are from three to four inches across, attract much attention on account of their size, beauty and the rapidity with which they open. They are constant and prolific bloomers.

Fine Mixed. **Pkt., 5c; $\frac{1}{8}$ oz., 25c.**

Shamrock

True Shamrock Seed is very rarely offered for sale in this country. It is a hardy perennial and will thrive in any good garden soil.

Pkt. 25c.

Salpiglossis

Produces very showy, funnel-shaped flowers of large size. Fine for beds. Half-hardy annuals.

Fine Dwarf, Mixed. **Pkt., 5c; $\frac{1}{8}$ oz., 25c.**

Grandiflora, Mixed. Large flowering

Pkt., 10c; $\frac{1}{8}$ oz., 35c.

Salvia, or Flowering Sage

Very ornamental; flowers borne in spikes of fiery red or crimson, and continue in bloom in open ground until after severe frosts. Start in heat and transplant into light soil, one to two feet apart. Excellent for bedding in masses or single planting. Hardy annuals.

Salvia Zurich, New Dwarf Early. The finest of all Dwarf Salvias. Very floriferous. **Pkt., 15c.**

Salvia Splendens. Brilliant Scarlet

Pkt., 10c; $\frac{1}{8}$ oz., 50c.

Bonfire (Clara Bedman). One of the finest Salvias ever introduced; compact bush about two feet in height and diameter. Its erect spikes of flowers of brilliant scarlet stand clear above the dark green foliage and completely cover the plant.

Pkt., 15c.; $\frac{1}{8}$ oz., \$1.00

For Salvia Plants, see Plant Department

Stocks—Double Ten Weeks

These popular flowers are easily grown, and are so highly fragrant and of such beauty that they deserve a place in every garden. They are great improvements over the Gilliflower of the olden times, being much larger and more densely double and of a great variety of colors.

Dwarf Large Flowering. White, Scarlet, Rose, Light Blue, or Mixed. **Pkt., 10c; $\frac{1}{8}$ oz., 50c.**

Emperor, or Perpetual. Mixed.

Pkt., 10c; $\frac{1}{8}$ oz., 50c.

Winter, or Brompton. Mixed.

Pkt., 10c; $\frac{1}{8}$ oz., 50c.

Giant Perfection. Handsome pure white.

Pkt., 15c; $\frac{1}{8}$ oz., 75c.

Giant Perfection. Double Mixed

Pkt., 10c; $\frac{1}{8}$ oz., 50c.

Virginian Stock

A fine, early flowering plant. Hardy annual.

Mixed. **Pkt., 5c; $\frac{1}{8}$ oz., 15c.**

Three Fine Named Stocks

Splendid for Forcing

Snowflake. Large double snow white flowers; dwarf, ten weeks. **Pkt., 15c.**

Beauty of Nice. Very large flowers of a delicate flesh pink. Extra fine. **Pkt., 15c.**

Princess Alice. Large flowering white, fine for cutting. Extra large spike. **Pkt., 10c.**

Saponaria

Pretty, dwarf bedding plants. Red, white and scarlet flowers. Hardy annuals.

Fine Mixed. **Pkt., 5c.**

Schizanthus

Beautiful, garden annuals, flowers charmingly fringed and delicately colored; one to two feet.

Mixed Colors. **Pkt., 5c; $\frac{1}{8}$ oz., 15c.**

Statice, or Sea Lavender

Beautiful for winter bouquets; flowers very pretty.

Annual Varieties. Mixed **Pkt., 5c.**

Perennial Varieties. Mixed **Pkt., 5c.**

Stipa Pennata

Grown for their plumes. **Pkt., 10c.**

SWEET PEAS

OUR Famous "Diamond Quality" Sweet Peas are selected with critical care and we offer the best productions of the foremost growers, including the latest, most valuable novelties. We conduct careful trials, and, for quality and assortment of varieties, our stocks are unsurpassed. Although we list only those we consider best, we can supply any variety in commerce, and special orders will receive careful attention.

CULTURE.—First and most important, plant as early in the spring as the conditions will permit. If the ground is well drained earlier flowers can be had from fall plantings. The ideal soil is cool, moist, and well drained, and should be dug up the previous fall, manure well worked in, and left to lie in the rough through the winter. In the early spring work this down enough to plant, which can be done before conditions will permit working of ground that has not been previously prepared. This gives an earlier and better start than if you wait until spring to work your soil, but late spring plantings will often give very satisfactory results in some sections.

Seeds should be sown at the rate of one ounce to fifteen feet. Make a trench about three to four inches deep, planting the seeds in the bottom about two inches deep, pressing the soil down firmly. After the plants are well up, thin to four or five inches apart, and draw the soil around them until the trench is filled above the level. This gives a depth to the roots, preserving the moisture. Keep the ground well worked and water as needed, an occasional thorough soaking being better than a daily sprinkling. Keep the flowers cut close and a pruning of the tips of the vines will also aid in prolonging the season of bloom and insuring better flowers.

1913 DIAMOND COLLECTION Superb Sweet Peas

SPECIAL OFFER of entire collection, 12 Pkts., \$1.75, postpaid.

"MARGARET ATLEE." The most perfect of the Duplex type yet produced. Color is a warm salmon pink suffused over a cream ground. The cream deepens into bright buff at base of standard and wings and this lights up the flower with splendid effect. Flowers are of very large size and are borne almost uniformly four on a stem. Certificate of merit American Sweet Pea Society.

Per pkt. 20 seeds, 25c.

"DUPLEX CREAM." The standards are large, bold and beautifully curved. A vigorous grower and produces many fours. Color a deep rich cream.

Per pkt. 20 seeds, 25c.

DAINTY—Spencer. A pure, glistening white with distinct margining of bright rose pink; comes four blossoms on long stems. Dainty is all its name implies and is the best picotee edge yet produced; very large and wavy.

Pkt., 10c; $\frac{1}{2}$ oz., 20c; oz., 35c.

ETHEL ROOSEVELT—Spencer. This is the season's finest offering, described by the originator as of the most perfect Spencer form; ground color a pleasing primrose or straw, overlaid with dainty flakes and splashes of bluish crimson, giving warmth and golden tinting to the yellowish groundwork. Gives novel and beautiful color effect when bunched.

Pkt., 10c; $\frac{1}{2}$ oz., 20c; oz., 35c.

EMILY ECKFORD—Spencer. A beautiful soft purple mauve, turning to blue, of finest form and substance; 4 large, wavy blooms on each long stem. A very desirable new Spencer. Pkt., 15c.

FLORENCE NIGHTINGALE—Spencer. Finest new lavender, of immense size. Bold, erect flowers of a charmingly soft, rich lavender with very delicate suffusion of rose; a beautiful, self-colored flower, frilled and waved. Bears four blooms on extra long stems. Pkt., 15c; $\frac{1}{2}$ oz., 50c; oz., 85c.

HELEN SCOTT—Spencer. Nothing yet offered equals this magnificent giant White. Perfect Spencer form, the large, gracefully poised flowers, on long stems, are simply perfection. Vigorous free blooming.

Pkt., 15c; $\frac{1}{2}$ oz., 40c.

MAUDE HOLMES—Spencer. A brilliant sun-proof crimson of the largest size. Of true Spencer form, wavy and fluted. The perfect blooms are carried on extra long stems. A crimson of real merit.

Pkt., 15c; $\frac{1}{2}$ oz., 40c.

PARADISE IVORY—A grand ivory white Spencer of the finest form. Flower of good substance on long stems, large and fully borne. A vigorous tall grower.

Pkt., 15c; $\frac{1}{2}$ oz., 40c; oz., 65c.

STIRLING STENT. In color it is a deep salmon suffused with orange. The flowers are of superb Spencer form, particularly effective by artificial light. Winner of a first class certificate and silver medal from the National Sweet Pea Society of England.

Pkt. 30 seeds, 25c.

THOMAS STEVENSON. The most brilliant orange scarlet, standard of deeper color than the wings. The flowers are of the finest Spencer form and generally come four to the stem. One of the grandest British novelties ever introduced, and a splendid addition to its class.

Pkt. 20 seeds, 15c.

VERMILION BRILLIANT. An intense pure scarlet self-color of rare beauty and substance. Absolutely sunproof. **Vermilion Brilliant** is the finest flower of its color. A stocky, vigorous grower and profuse bloomer, the long, strong stems often carry four perfect flowers of the ideal Spencer type.

Pkt. 20 seeds, 15c.

 The past season was the most disastrous in the history of sweet pea culture and few novelties are offered for 1913. But our select list of most desirable varieties including the recent introductions, containing the cream of the most meritorious sweet peas either for garden or exhibition purposes is complete and leaves nothing to be wished for that is obtainable.

JOIN THE OREGON SWEET PEA SOCIETY

You May Win Our Beautiful Solid Silver Trophy Cup---Value \$60.00---For the Best Eight Spencer Varieties in Vases of Ten or More Stems Each.

Only amateurs who are members can compete, so every member has a chance to win. The Society's Exhibition in Portland last July was a grand success and the coming show will be one of the big events of the season. If you are a lover of Sweet Peas you should be a member of the Oregon Sweet Pea Society. **50 cents will pay all dues for one year.**

SWEET PEAS—Continued

New Spencers

A Splendid Collection, Including the Best of the Recent Novelties.

THE new "Spencer" type has lovely waved and fluted flowers of gigantic size, and in exquisite colorings, length of stem and lasting qualities are much superior to the older types. "Spencers," however, are very shy seeders and require much careful selection to develop fixed types. The seed is therefore scarce, and cannot be cheaply produced.

America — Spencer. The largest and finest of its class. Pure satiny white, striped and splashed brilliant crimson; 4 flowers of perfect form borne on long stems. **Pkt., 10c; ½ oz., 20c.**

Apple Blossom Spencer. A truly giant flower; color standard rose with deeper veining, wings light carmine, ground color, primrose.

Pkt., 10c; ½ oz., 20c; oz., 35c.

Asta Ohn. Lavender, suffused with mauve; of perfect form, largest size, 4 blossoms on long, strong stems; very vigorous.

Pkt., 10c; ½ oz., 20c; oz., 35c.

Aurora Spencer. Ground color cream white, exquisitely flaked and mottled, rich orange salmon, extra large, free-blooming.

Pkt., 10c; ½ oz., 20c; oz., 35c.

Constance Oliver. A clear rich pink on cream ground, of true Spencer type; best of its color.

Pkt., 10c; ½ oz., 40c; oz., 65c.

Countess Spencer—Pink. The first Sweet Pea of the Spencer type. Flowers extremely large, beautifully expanded, crumpled and waved. Color silvery white suffused and tinted with soft shell pink, deeper at the outer edges.

Pkt., 10c; ½ oz., 20c; oz., 35c.

Geo. Herbert. Our own select strain; a bright rosy-carmine, open form, beautifully waved; a magnificent, vigorous Sweet Pea of giant size.

Pkt., 10c; ½ oz., 20c; oz., 35c.

Flora Norton. Bright blue with just a tinge of purple, fine Spencer form

Pkt., 10c; ½ oz., 20c; oz., 35c.

Helen Lewis. A giant flower of perfect form; standard rich crimson orange, wings orange rose; open form, full, wavy.

Pkt., 10c; ½ oz., 20c; oz., 35c.

John Ingman. Rich rose crimson, large flowers of good substance.

Pkt., 10c; ½ oz., 20c; oz., 35c.

Juanita. A unique and pleasing combination of pearly gray white, ground splashed and striped lavender.

Pkt., 10c; ½ oz., 20c; oz., 35c.

King Edward Spencer. Bright Crimson Scarlet, largest size, wavy standard, drooping wings, very long stems; one of the finest bright reds.

Pkt., 10c; ½ oz., 30c; oz., 50c.

Mrs. Routzahn. Color, a soft straw tinted with blush pink, shading to apricot and rose at the edges, with a distinct rose margin; of immense size; one of the finest Spencers.

Pkt., 10c; ½ oz., 20c; 1 oz., 35c.

Othello Spencer. Very deep maroon of largest Spencer type; wings very wavy, large and drooping; the finest of its color.

Pkt., 10c; ½ oz., 20c; oz., 35c.

Marie Corelli. Rosy carmine tinted cherry red; beautifully waved. Award of merit, R. H. S., 1911.

Pkt., 10c; ½ oz., 30c; oz., 50c.



NEW
"DUPLEX"
SPENCER
Page 60

Primrose Spencer. Color, a true primrose. Very vigorous, free-flowering, excels in beauty of form, length of stem and keeping qualities.

Pkt., 10c; ½ oz., 20c; oz., 35c.

Marjorie Willis. A brilliant rose carmine of the Marie Corelli class and considered a better flower, of finest Spencer form, the long stems carry four well-placed flowers; one of the best.

Pkt., 10c; ½ oz., 30c; oz., 50c.

Mrs. Walter Wright. A distinct bright shade of rosy mauve, extra large, fine flower, waved and ruffled, vigorous and free flowering.

Pkt., 10c; ½ oz., 30c; oz., 50c.

Ramona Spencer. Pure white with light carmine and blush stripes; large, good form, free flowering.

Pkt., 10c; ½ oz., 20c; oz., 35c.

White Spencer. A pure white flower of enormous size, beautifully crinkled and fluted, of splendid substance.

Pkt., 10c; ½ oz., 30c; oz., 50c.

Satin Queen Spencer. A new delicate glistening pink, shading to dainty primrose; a most charming flower of graceful poise, large wavy and ruffled, free flowering, long stems, a royal beauty.

Pkt., 10c; ½ oz., 20c; oz., 35c.

Queen Alexandra — Spencer. We will all welcome Queen Alexandra in Spencer form, as there is no better bright, intense scarlet, sun-proof Sweet Pea. Of large, full, waved form. Free flowering and vigorous.

Pkt., 10c; ½ oz., 20c; oz., 35c.

Senator — Spencer. Of finest Spencer form and largest size. The coloring is a combination of deep claret and chocolate, striped and flaked on a light heliotrope ground. The coloring though dark, is brilliant and attractive. A free flowering, vigorous grower of the greatest merit.

Pkt., 10c; ½ oz., 20c; oz., 35c.

**PORTLAND SEED COMPANY'S
SWEET PEAS—Continued**

"UNWINS"—Splendid New Sweet Peas in This Popular Class.

THE "UNWINS" resemble the Spencer type, although being of entirely different origin. They are not quite so large as the Spencers, but of fine form and substance, very vigorous and free-flowering, and always come true. In this respect they are superior and more dependable than Spencers, which often "sport" in the most unaccountable manner. For substance, color, and bloom, Unwlns are unsurpassed.

**Price, except where noted, Pkt., 5c;
oz., 25c; $\frac{1}{4}$ lb., 75c.**

Chrissie Unwin. Beautiful cherry scarlet, self-color, wavy, standard, finest form.

E. J. Castle—Crimson Rose. A magnificent open form flower of grandest size and unique coloring, being a rose crimson veined deeper rose, its brilliancy being enhanced by artificial light; fluted border.

Gladys Unwin—Light Pink. A large, bold flower, not hooded, but with standard and broad wings, of the new orchid-flower type, this is similar to Countess Spencer, but several shades lighter in its lovely pink color.

Mrs. Duncan. A brilliant scarlet similar to King Edward Spencer, but having the Unwin form and habit.

Nora Unwin—White. A grand new pure white of the same beauty of form, waved and fluted standard and wings as Gladys Unwin. Flowers of grand substance, borne three on long stems. This pea was given an award of merit at the trials of the N. S. P. S., Reading, England, and is one of the finest whites.

Prince Olaf. A fine new Unwin of largest size. Flaked and striped blue on a white ground.

Frank Dolby. Color delicate light lavender of great beauty, bold, wavy standard with widely spreading fluted wings.

Phyllis Unwin—Deep Rose. The largest of the Unwin types, beautifully waved and crinkled, standard upright, wings broad. Flowers 3 to 4 on long stems. Color a rare shade of deep rose self-color. Phyllis Unwin is a fixed type and will come true from seed.

St. George. Brilliant orange standard, the large wings a distinct orange carmine; does not burn in the sun, and is the finest of all the orange shades.

**PLANT
DAHLIAS
For Autumn Flowers**

THE magnificent new varieties we offer make the most beautiful and decorative of cut flowers. They are erect on good stems and will keep for days.

Select List of Finest Large Flowering Sweet Peas, the Best of Their Color and Type

Prices, unless otherwise stated, 5c per Pkt. 15c per oz.; 40c per $\frac{1}{4}$ lb.; \$1.25 per lb. postpaid.

White

Dorothy Eckford. Pronounced by Sweet Pea experts to be the grandest pure white yet seen of the grandiflora type. Grows an enormous mass of bloom.

Pink and White

Earliest of all. An improved strain of the very popular Blanche Ferry, beginning to flower fully a week earlier.

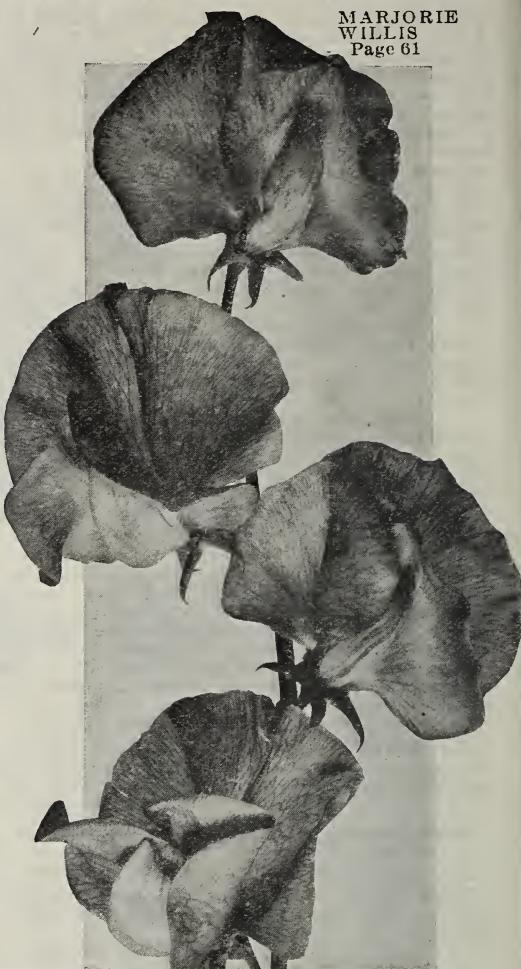
Blanche Ferry. Standard wide and erect, bright rose pink, wings are creamy white, tinted with rose.

Blue and White

Helen Pierce. The most beautiful bright shade of true blue mottled on a brilliant pure white ground; 3 or 4 blossoms on long stem. A grand flower of the largest size; very free and vigorous.

Oz. 15c; $\frac{1}{4}$ lb. 50c.

Maid of Honor. Flowers beautifully shaded with light blue on a white ground and boldly edged deep rich violet; very dainty.



MARJORIE
WILLIS
Page 61

Red, Scarlet and Maroon

Queen Alexandra. An intense bright scarlet of grand substance; a bold robust flower of giant size and finest form, is sun-proof, very vigorous and free flowering.

King Edward VII. A lovely, intense crimson. A truly giant flowered variety. The finest crimson to date. Strong stems and growth.

Prince of Wales. Rose crimson, fine sort.

Lord Rosebery. Fine form and substance; very free-flowering and robust. The flowers borne on long stems, are of a rose carmine, showing veins of deeper rose.

Black Knight. Large size, a rich, dark claret, almost black; somewhat veined.

Prince Edward of York. Standard crimson scarlet wings rose.

Finest Large Flowering Sweet Peas—Continued

Price unless otherwise stated, 5c per Pkt.; 10c per oz.; 20c per 1/4 lb.; 60c per lb., postpaid.

Pink—Deep Shades

Bolton's Pink. A rare orange pink of great brilliancy and beauty, not injured by the sun.

Oz., 15c, 1/4 lb., 35c

Janet Scott. A large, grand flower; deep, rich pink.

Pink—Light Shades

Countess of Latham. Fine large flowers. A soft, cream tint heavily shaded with soft flesh pink in the center of the standard and wings shading much lighter at the edges.

Dalnty. Large flowers, white with pink edge.

Lovely. The most beautiful shades of soft shell-pink, changing to very light rose at the outer edges. Grand flowers of large size.

Prima Donna. A most beautiful bright shade of blush-pink. Flowers of a large size and finest form.

Cream or Light Yellow

Golden-Rose. The large flowers are of fine open form, with standard gracefully fluted. A clear crimson-yellow, beautifully flushed with rosy pink.

Hon. Mrs. E. Kenyon. Rich, primrose. A bold, giant flower. The best in this shade.

Sybil Eckford. A unique shade of apricot-lemon, one of the finest Eckfords.

Mrs. Collier. A true primrose of fine form.

Double Sweet Peas

Phenomenal. This variety is practically a double Lottie Eckford, being white shaded and edged with blue. The blossoms are large and nearly always double.

Pkt., 10c; 1/2 oz., 20c.

White Wonder. Best double white, often producing 6 or more flowers on long stems; large, free-blooming and vigorous.

Pkt., 10c; 1/2 oz., 20c.

Mixed. These have two to three standards and frequently three wings. The petals are beautifully incurved and frilled.

Pkt., 5c; oz., 15c; 1/4 lb., 50c; lb., \$1.00.

Lavender

Flora Norton. A beautiful rich lavender free from mauve or pink; large.

Lady Grisel Hamilton. Most attractive light lavender shading; flowers of large size.

Oz. 15c; 1/4 lb. 30c.

Blue and Purple

Captain of the Blues. The flowers have the appearance of being a true blue.

Mrs. Geo. Higginson, Jr. A new shade, "sky blue;" good size.

Romolo Piazzini. A rosy purple, quickly changing to intense violet blue; the only pea of its color; a grand variety.

Lord Nelson, or "Brilliant Blue." A brilliant dark navy blue with tips of wings a lighter blue. Giant flowers, slightly hooded.

Orange and Salmon

Henry Eckford. A distinct orange scarlet of the finest form and largest size: as beautiful under artificial lights as in daylight.

Lady Mary Currie. Large, salmon-pink, shaded with carmine; finest of its color.

Miss Willmott. Described as an "orange-pink" delicately shaded rose. Enormous flowers, borne erect on long, stiff stems.

Venus. Lovely salmon-buff, shaded with rosy pink. Fine, large flowers.

ROSE DU BARRI—A truly marvelous new Pea, the color is a rich, deep carmine rose and orange.

While of the Grandi Flora type, Rose du Barri is large, full and slightly waved.

Pkt., 10c; oz., 25c; 1/4 lb., 60c.

Striped and Variegated

America. Bright red on a silvery white ground showy.

Jesse Cuthbertson. Creamy white striped rich rose; large.

Sweet Peas in Mixture

Diamond Mixture

This is the most perfect blend of the finest named varieties it is possible to produce. As formerly, this mixture will contain the novelties of the preceding season, and the addition of the rare Spencer types will complete the grandest mixture of new large-flowering Sweet Peas ever grown. It will delight the most critical; if you are undecided as to the varieties or colors you want, buy the "Diamond Mixture."

Sold in 1-oz. sealed pkts. only, at 15c each; 2 for 25c; 12 for \$1.25. Not sold in bulk.

Our Superb Mixture—True Spencers Only

A splendid mixture, carefully proportioned and blended to produce pleasing and harmonious combinations of color, containing the most beautiful shades and variations of the wonderful Spencer types. **These are not seedlings, but carefully selected named varieties that retain all their purity and brilliancy of color.**

Pkt., 10c; oz., 35c; 1/4 lb., \$1.00; lb., \$3.50.

Special Mixtures to Order

If you want to produce any special effect or color scheme, let us know your requirements. We can supply the correct color or mixture.

Extra Mixed. Select standard varieties of the finest colors.

Pkt., 5c; oz., 15c; 1/4 lb., 40c; 1/2 lb., 60c; lb., \$1.00.

Sweet Peas—Christmas Flowering

FOR winter flowers under glass, sow as early as August and in succession as desired. They grow 4 to 5 feet high and will bloom in 60 to 90 days.—Give carnation temperature.

Angeleno—Self Pink.

Pkt., 10c; oz., 25c.

Earliest of All—Rose and white.

Pkt., 10c; oz., 25c.

Flamingo—Crimson.

Pkt., 10c; oz., 25c.

Mrs. Alex. Wallace—Lavender.

Pkt., 10c; oz., 25c.

Mrs. Geo. Lewis—White.

Pkt., 10c; oz., 25c.

Mrs. Wm. Slim—Salmon Pink.

Pkt., 10c; oz., 25c

Scabiosa**Sweet Scabious, or Mourning Bride.**

Free-flowering annuals; colors, white, carmine, lilac, maroon, etc. Very effective for garden decoration and valuable for cutting.

Dwarf or Tall Double Mixed.

Pkt., 5c; $\frac{1}{4}$ oz., 15c.

Smilax

Charming, tender, perennial climber for greenhouse or window gardens. The foliage and stems are of pleasing light green; very graceful; excellent for decoration. (See Plants). Pkt., 10c; $\frac{1}{4}$ oz., 25c.

Snapdragon, or Antirrhinum

One of the most useful and showy of border plants, of almost every color, and striped as beautifully as Carnations. They have recently been much improved and are now really magnificent. Hardy perennial.

Tall, Finest Mixed

Pkt., 5c; $\frac{1}{4}$ oz., 20c.

Dwarf, Finest Mixed.

Pkt., 5c; $\frac{1}{4}$ oz., 20c.

Pure White. Dwarf.

Pkt., 10c; $\frac{1}{4}$ oz., 30c.

Firefly. Dwarf; scarlet

Pkt., 10c; $\frac{1}{4}$ oz., 30c.

Sunflower, or Helianthus

Stately growing annuals with immense golden yellow flowers; effective for garden decoration.

Double Dwarf. Covered with three-inch double flowers of brightest golden yellow.

Pkt., 5c; oz., 25c.

Globosus Fistulosus. Saffron, very large, double and handsome.

Pkt., 5c; oz., 25c.

Multiflora. Beautiful, double yellow flowers.

Pkt., 5c; oz., 25c.

Mammoth Russian. See Field Seeds.**Sweet Rocket, or Hesperis**

An old hardy, garden favorite. Fragrant white flowers; 2 to 3 feet.

Pkt., 5c; $\frac{1}{4}$ oz., 15c.

Sweet Sultan, or Centaurea

Favorite annual of easy culture. Showy for the garden and greatly prized for bouquets. The large heads of bright flowers are very fragrant; 1 $\frac{1}{2}$ feet.

Mixed Colors. Purple, White, etc.

Pkt., 5c; $\frac{1}{4}$ oz., 15c.

Sweet William, or Dianthus Barbatus

A well-known, remarkably free-flowering plant, of brilliant colors, ranging from snow white to darkest crimson and purple. They emit a very delicate and refreshing fragrance. Hardy perennial.

Single Mixed. Very beautiful.

Pkt., 5c; $\frac{1}{4}$ oz., 25c.

Dunnettii. Dark crimson, single.

Pkt., 5c; $\frac{1}{2}$ oz., 30c.

Pure White. Single.

Pkt., 5c; $\frac{1}{2}$ oz., 50c.

Double Mixed.

Pkt., 10c; $\frac{1}{2}$ oz., 50c.

Thunbergia

Rapid-growing annual climbers; splendid for trailing over trellises, fences, etc., beautiful flowers borne in profusion; buff, white, orange, etc., four to six feet high.

Mixed Colors.

Pkt., 5c; $\frac{1}{4}$ oz., 25c.

Tritoma

Sometimes called Red Hot Poker. This is a fine handsome plant. It is hardy, though requiring some protection through the winter. The flowers are produced in large spikes of brilliant rich flowers. Cut flowers keep a long time. Half-hardy perennial.

Uvaria. Dazzling orange red.

Pkt., 15c.

Vinca

Tender perennial. Fine for pot culture. Flowers white and pink.

Mixed.

Pkt., 10c.

Verbena

Very few annuals will make such a gorgeous display during the summer months, or furnish more flowers for cutting, than the Verbena. Start seed in the house or under glass early in the spring, and transplant after three or four inches of growth. They flower in July and continue strong and healthy until destroyed by frost.

Hybrida Cholcest Mixed. Very finest.

Pkt., 10c; $\frac{1}{4}$ oz., 50c.

Mammoth Mixed. Selected; extra large, fine.

Pkt., 15c; $\frac{1}{4}$ oz., 75c.

Fine Mixed

Pkt., 5c; $\frac{1}{4}$ oz., 35c.

Candidissima. Pure white.

Pkt., 10c; $\frac{1}{4}$ oz., 50c.

Scarlet Defiance. Fiery Scarlet.

Pkt., 10c; $\frac{1}{6}$ oz., 50c.

Pink Shades.

Pkt., 10c; $\frac{1}{4}$ oz., 50c.

Coerulea. Bright Blue.

Pkt., 10c; $\frac{1}{4}$ oz., 50c.

Lemon Verbena

Every garden should have a few plants of this fragrant favorite. Its pale green foliage goes well with any flower.

Pkt., 10c.

Violet

Viola Odorata is the well-known English Violet, a free-flowering, hardy perennial. Easily grown from seed, though somewhat slow in germinating; succeeds best in partially shaded moist places.

The Czar. Finest forcing Violet. Very large, dark blue.

Pkt., 25c; $\frac{1}{6}$ oz., \$1.00.

Odorata Blue. Very fragrant.

Pkt., 10c; $\frac{1}{6}$ oz., 50c.

Odorata White. Very fragrant.

Pkt., 10c; $\frac{1}{6}$ oz., 50c.

Odorata. Finest Mixed.

Pkt., 10c; $\frac{1}{6}$ oz., 75c.

Valeriana

Fine border plants; sweet scented flowers.

Fine Mixed.

Pkt., 5c.

Viscaria,—Rose of Heaven

Their profusion of bloom will always rank them among general favorites.

Fine Mixed.

Pkt., 5c.

Wall Flower

(Cheiranthus Cheri.) Produces spikes of beautiful, exceedingly fragrant flowers. Half hardy perennial.

Cloth of Gold. Large, fine, single.

Pkt., 10c; $\frac{1}{4}$ oz., 35c.

Goliath. Single, extra large, fine dark brown, very early; fine for forcing.

Pkt., 15c; $\frac{1}{4}$ oz., 50c.

Mixed, Single, large flowering.

Pkt., 5c; $\frac{1}{4}$ oz., 25c.

Parisian Forcing. Single.

Pkt., 10c; $\frac{1}{4}$ oz., 35c.

Finest Double Mixed. Branching.

Pkt., 10c; $\frac{1}{6}$ oz., 75c.

Zea, or Ornamental Maize

Japonica Variegata. Finest mixed. All varieties.

Pkt., 5c; oz., 20c.

Gracillima Mixed.

Pkt., 5c; oz., 20c.

Zinnia Elegans

Of easiest cultivation and should be in every collection. Half hardy annuals.

Tall Double Mixed.

Pkt., 5c; $\frac{1}{4}$ oz., 25c.

Dwarf Double Mixed.

Pkt., 5c; $\frac{1}{4}$ oz., 25c.

Dwarf Scarlet.

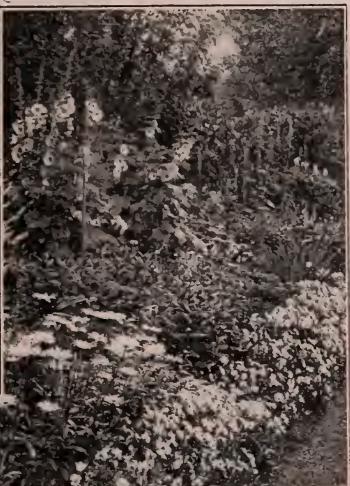
Pkt., 5c; $\frac{1}{4}$ oz., 25c.

Annual and Perennial Bedding and Pot Plants

WE offer a select list of Bedding and House plants, beautiful and useful varieties that are easily grown. Fine, large, well rooted specimens that can be safely packed and promptly delivered in perfect condition. If you contemplate large plantings or special effects let us know your plans and requirements. We can supply in any quantity for any planting purpose at lowest prices.

Hardy Perennial Garden Plants

Once planted require but little care and bloom with increasing beauty each year.
Plants marked 15c, are \$1.50 doz.; 20c, \$2.00 doz.; 25c, \$2.50 doz.



ANEMONE JAPONICA—Beautiful fall blooming plants. Pink or white. 20c; 2 sorts 35c.

ANCHUSIA ITALICA—Tall growing hardy plant, with pretty blue flowers in large racemes. 20c each.

ARABIS ALPINA (Rock Cress) Low growing, fine for bordering. Covered in spring with white blossoms. 15c. each; \$1.50 per dozen.

CAMPANULA—New Double White—A dainty and beautiful flower, 2 to 2½ feet high, bearing spikes of large snow white, prettily formed, fully double blossoms. Pinch off the old flowers and the plant will bloom continuously. One of the best border or bedding plants ever offered. 25c. each.

COREOPSIS, *Golden Sunbeams*—Beautiful golden-yellow flowers on long stems; always in bloom; fine for cutting. 15c. each.

SHASTA DAISY, *Alaska*—This new "Shasta" is covered with immense fluffy white blooms, with golden eyes, from July until late fall; long stems; fine for cutting; one of our best hardy border plants. 20c. each.

DORONICUM—Early spring flowering Marguerite-like yellow flowers. Fine border plant. 20c each.

CANTERBURY BELLS—Pink, white, blue, large clumps. Each, 20c; doz. \$2.00.

ENGLISH PRIMROSES—Finest sorts, from pure yellow to deepest crimson-maroon; early, low-growing, fragrant. 20c. each.

GAILLARDIA GRANDIFLORA—Splendid large flowers; combination coloring of yellow, brown, crimson, orange; height 2 feet; bloom until frost; fine for cut flowers; hardy everywhere. 20c. each.

HELIANTHUS SPARSIFOLIA—Superb new single sunflower of striking beauty; blooms late in the season. A real gem among hardy plants. We especially urge you to give this a trial. 20c. each.

HOLLYHOCKS, New Double—Red, yellow, pink white. 15c. each, 4 for 50c; large clumps, each, 25c; doz., \$2.00.

PLUMBAGO LAIPENTEA—Fine edging plant growing four inches high and covers all summer with sky blue flowers. 15c. each, \$1.50 per dozen

POPPY ORIENTAL—Immense rich orange scarlet flowers. 20c. each.

RUDBECKIA, *Golden Glow*—Bears in greatest profusion immense, double blooms, large as Dahlias, of the brightest, golden yellow; hardy everywhere. 15c. each.

RUDBECKIA NEWMANI—(Black-eyed Susan)—Golden yellow ray petals around a dark center. Fine cut flowers. 15c. each.

DELPHINIUM BELLADONNA—(Larkspur)—Grand garden plants; light blue flowers. 25c. each.

Mastodon Pansies

For Seed and Description See page 57

"Mastodon Pansies" in Bloom

From March until June we offer our famous "Mastodon" Pansy plants in full bloom—none finer in the world. Put up one dozen in a basket.

Price, 60c to \$1.00 per basket by express, buyer to pay charges. You will not be disappointed in these.

Giant Pansies

NEW GIANT PANSIES—Our Giant Plants are in a class of their own and can not be compared to any other Giant Pansies, no matter where grown. We know that their equal is not produced in this or any other country. A trial basket will convince you. They are the best value ever offered in a bedding plant.

Each, 5c; per dozen, 50c; by mail, 75c dozen.

MASTODON PANSEY SEED

We offer a limited amount of this hand selected seed, DIAMOND MIXED.
Per pkt., 25 cents.

Large Trade pkt., \$100



Perennial Phlox

HARDY as an oak, increasing in beauty each year, few things are as beautiful and satisfactory. The marvelous new colors, beautiful foliage and easy culture, make this choice flower one of the most desirable. We offer the following fine collection, which we have grown. **Price, each, 15c; doz., \$1.50.**

R. P. STRUTHERS—Tall, rosy carmine with claret-red eye; fine.

EGENE DANZANVILLIER—Tall, lilac, shading white towards the edges; large white center.

MRS. JENKINS—Tall; the best tall early white for massing.

VESUVIUS—Medium; one of the new seedlings; pure red with bright purple eye; a dazzling color.

SUNSHINE—Dwarf; large, aniline-red with crimson-red eye and light halo.

GEO. A. STROHLEIN—Medium bright scarlet with crimson red eye; does not bleach.

CARAN D' ACHE—Medium; geranium-red with old rose shadings and white eye; very effective.

MME. PAUL DUTRIE—Tall; a delicate lilac rose, reminding one of the beautiful soft pink Orchids.

ANTONIN MERCIE—Medium; light ground color; upper half of each petal deeply suffused bluish-lilac, large white halo.

SELMA—Tall; large flower; pale rose mauve with claret eye.

VON LASSBURG—Medium; the purest white in cultivation, individual flowers larger than any other white.

CONSUL H. FROST—Medium; pure red with bright French-purple eye.

Popular Bedding Plants

During the months of April and May we have thousands of the following hardy bedding plants, price per dozen by express at buyer's expense.:—

Alyssum	\$.30	Daisies	\$ 1.00	Lobelia.....	\$.30	Phlox.....	\$.30
Asters .....	.30	Forget-Me-Not .	1.00	Marigold.....	.30	Salvia.....	.50
Carnations .....	.60	Geraniums 75c to \$2.00		Mignonette .....	.50	Stocks.....	.30
Cosmos.....	.30	Heliotrope.....	.50	Petunia.....	.50	Verbena.....	.30
				Pansies.....	.50		

For description of these flowers, see Flower Seed Department.

Miscellaneous Ornamentals

Yucca

SPANISH BAYONET OR ADAM'S NEEDLE—

Has a fine appearance; the stems grow two or three feet above the ground; covered with large, bell-shaped flowers on laterals, forming a perfect pyramid; valuable for rockwork.

FILAMENTOSA—Thread leaved, creamy white; July. **Plants, 2 feet, each, 75c to \$1.00**

Bleeding Heart

SPECTABILIS. One of the most ornamental of hardy spring flowering plants, with elegant green foliage and long, drooping racemes of heart-shaped flowers. This is deemed one of the finest of all hardy garden plants.

Strong roots **Each, 30c, postpaid.**

New White Bleeding Heart

SPECTABILIS ALBA. A splendid novelty for conservatory or cool greenhouse. If planted outside, must be placed in a sheltered position. A pure white, free-blooming, beautiful variety of great value.

Strong roots **Each, 50c, postpaid.**

Pampas Grass

A noble ornamental grass, easily grown, producing long, pointed leaves and majestic, silvery white plumes, which are very valuable for winter decoration; grows 6 to 8 feet high.

Strong roots, each, 60c to 75c
Large specimen plants, \$2.00 to \$5.00

Tritoma—(Pfitzeri)

Everblooming Flame Flower or Red Hot Poker

This new sort is of a rich orange scarlet, blooming from mid-summer to latest fall; spikes 3 to 4 feet high; one of the very best of this useful class, which is hardy with slight protection, but winter best if lifted and stored in sand. These hardy perennials are unsurpassed as border plants or for mass effects.

Strong flowering roots 25c; doz., \$2.50 prepaid



Pampas Grass

St. Johns Wort - Clump

Low growing with yellow blooms; a drought resister. July and August. **Clumps, 50c**

Caladium

Esculentum—(Elephant's Ear) Grand tropical looking plant. A favorite for specimens on the lawn, or for bordering large sub-tropical groups. In deep, rich soil, if freely watered, they produce enormous leaves, frequently four feet long by three feet wide. Plant in the spring. Height, 4 to 5 feet.

Each, 25c; doz., \$2.00

IRIS

MAGNIFICENT plants for the garden. They bloom profusely and are exceedingly showy and fragrant. The colors are brilliant and cover a wide range of different shades and combinations. In the open ground they are perfectly hardy, increase rapidly and make a magnificent display either in clumps or in borders. They do best in rich moist soils. If soil is light, depress the beds a little below their surroundings; this helps to collect and hold the moisture. Plant in the fall or early spring.

Spanish Iris

Spanish Iris is the most useful and satisfactory Iris to grow, requiring no unusual condition or treatment to insure success, growing to perfection in any good garden soil. They are vigorous and hardy, early and free blooming, keeping well when cut; can also be forced easily, being great favorites with florists.

Spanish Iris comes in the most delicate and beautiful shades and colors, from white, through dainty blues to lavender, dark blue, pure rich yellow, etc. Bulbs are inexpensive and we urge you to plant freely.

Blooms in early June two weeks before the English variety. The varieties listed are best of their colors.

BLANCHE FLEUR—A grand white flower of great substance. The best white for forcing or outdoor culture.

CAJANUS—A magnificent tall golden yellow, free blooming, good keeper; best yellow Iris in cultivation, either to force or grow outside.

COUNT OF NASSAU—The finest dark blue Iris. Has an agreeable honeysuckle perfume.

KING OF THE BLUES—Finest of the dark blues.

LOUISE—A beautiful shade of light blue, large, splendid flower.

EMPEROR—A splendid new light yellow of great merit.

DARIUS—A pleasing light blue—earliest of all.

FINEST NAMED VARIETIES.

Each 3c; doz., 30c; 100, \$2.00

MIXED, SELECT, ALL COLORS.

Each, 3c; doz., 20c; 100, \$1.50

German Iris

German Iris is one of the best of the early spring flowers, is hardy everywhere, and if planted in a moist situation or watered freely, will produce magnificent orchid-like blooms of great size and delightful fragrance. Comes in charming color effects in blues, browns, yellows, purples, white.

PALLIDA DALMATICA—Extra large, lovely true lavender, delightful fragrance, free flowering, fine for massing or as a cut flower.

FLORENTINE ALBA—White.

CELESTE—Satin blue.

SPECTABILIS—Violet purple.

SHAKESPEARE—Bronze violet.

MARS—Light yellow and cream.

CHOICE ROOTS Each, 15c; doz., \$1.50; 100, \$10.00.

English Iris (Iris Anglica)

English Iris is almost as large as the Japanese variety and also comes in a marvelous range of colors and variegations, is extremely hardy, growing 18 inches to 28 inches high, coming into bloom just before the Japanese Iris. Like all Iris a moist situation is preferred, but any good soil will grow them splendidly. Plant 3 to 4 inches apart. English Iris is one of the best for naturalizing.

MOUNT BLANC—Largest and finest. Pure white. Each, 6c; doz., 60c; 100, \$4.00.

ASSORTED COLORS, 10 BEST VARIETIES. Each, 4c; doz., 40c; 100, \$2.50.

MIXED Each 3c; doz., 30c; 100, \$2.00.



German Iris

Japanese Iris (Iris Kaempferi)

Japan Iris is the largest and most wonderful of the Iris family, no flower of any kind surpassing its rare beauty of form, brilliancy and variety of coloring, ranging from snow-white through maroon, violet and deep blue; striped, variegated, veined and blended in the greatest profusion, producing effects that are truly marvelous and indescribable. Blossoms early summer. Japan Iris succeeds best in a moist location, but will thrive in any good garden soil. Plant three inches deep, about 4 inches apart; divide the clumps every two years. Fertilize established beds while dormant using stable manure, but do not apply after growth starts. There are hundreds of varieties, from which we have selected the following:

GEKKA-NO-NAMI—Dense pure white, yellow blotches.

HO-O-JO—Ruby crimson, primrose blotches, surrounded with white halo.

HANA-NO-NISHIKI—Brilliant claret red, penciled white, purple orange blotches.

SOFU-NO-KOI—White splashed, blotched and speckled sky-blue, primrose blotches.

SHIMOYO-NO-TSUKI—White, yellow blotches at base of petals; 6 large petals.

UJI-NO-HOTARU—Purple overlaid with sky-blue, orange blotches, 3 petals.

YEZO-NISHIKI—Deep rich crimson, mottled and blotched white, 3 standards same color.

YOMO-NO-UMI—Lavender blue; distinct and beautiful: 6 petals.

KUMA-FUNJIN—Purple overlaid with navy blue, 2 standards, very large orange blotches.

KUMOMA-NO-SORA—White, with a strongly marked sky-blue zone and mottled in the same shade.

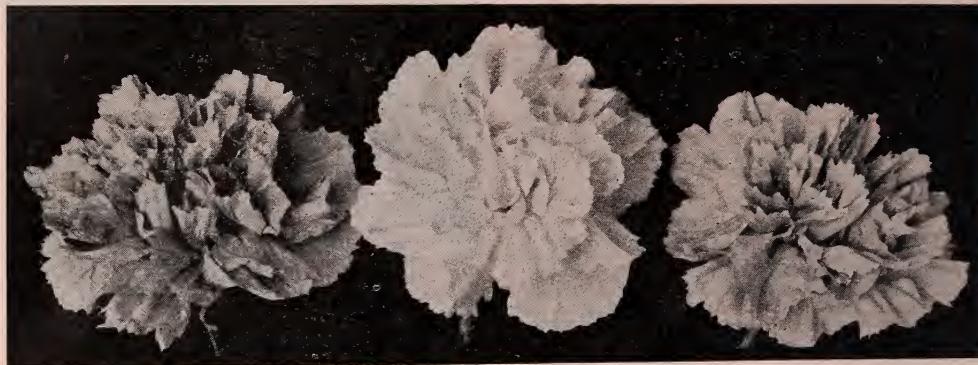
KUMO-ISHO—Purple, margined gray, yellow blotches, surrounded with velvety crimson.

KUMO-NO-OBI—Dark lavender purple, large handsome flower, 3 petals.

NAMED VARIETIES. Each, 20c; doz., \$2.00; 100, \$15.00

MIXED, GOOD ASSORTMENT. Each, 15c; doz., \$1.50; 100, \$10.00.

Carnation Plants



CARNATIONS will thrive in any good fresh garden soil. After danger of frost is over set 10 to 12 inches apart each way, cultivate and water as needed until they begin blooming, then mulch with light manure that has straw in it, plants should be staked or strung to support them. Carnations are easily grown in the house for winter flowers.—For finest carnation seed, see page 51.

Eight Choice Novelties in Carnations

Price, 20c each; set of 8 sorts, \$1.25, postpaid.

AFTERCLOW—A giant among Carnations, being of very rank growth and producing all season long its very large cerise-colored flowers in great freedom. One of the finest sorts extant.

BONORA—A beauty, fancy variety of fine size and form, borne on long stout stems. Color white flaked and splashed with red.

BONFIRE—A splendid new scarlet Carnation which blooms throughout a long season. Flowers large, finely formed, delightfully scented and produced on long stems. No finer sort of this color is to be had.

MAY DAY—This Carnation has that exquisite shade of pink so greatly in demand, but not found in our standard sorts. Form, size and calyx grand.

MRS. C. W. WARD—This variety has been greatly admired wherever it has been seen for its desirable color, being a beautiful delicate shade of pink; flowers of large size and very freely produced.

PINK DELIGHT—A grand new variety bearing profusely on long stems, crisp wax like flowers of a delicate flesh pink shade. A beauty.

RUBY—The largest and best of its color, a bright dazzling crimson. Flowers often measure three inches in diameter, and are well supported on long stiff stems. A wonderfully free bloomer, always full of buds.

SHASTA—A beautiful pure white, of excellent texture and extreme size. Very free flowering with blooms conspicuously displayed above the foliage.

Standard Everblooming Carnations

Price: 15c. each; 4 for 50c.; set of 12 fine varieties, \$1.25, postpaid.

BEACON—A bright, deep scarlet; a most perfect color, soft yet brilliant; the flower is of the largest size and perfectly double; nicely fringed; sweet.

BOUNTIFUL—Color pearly white, very large, with heavy glistening petals, delicately fringed; very fragrant.

ELDORADO—Deep golden yellow, splashed and striped with red; a very rich combination of colors and a novelty of much merit.

DOROTHY GORDON—Very large rose-pink flowers on fine long stems. A beauty.

ENCHANTRESS—Flowers very large, borne on long stems. The color is a superb shade of flesh pink. An early and continuous bloomer.

MRS. THOMAS W. LAWSON—Simply superb, both in form and color; brilliant dark pink, of immense size.

PRESIDENT ROOSEVELT—Magnificent, bright, rich crimson; large, perfectly double flowers.

VICTORY—Regarded by many as the finest scarlet Carnation. In color it is the most intensely brilliant scarlet; stems long and firm, holding the flowers upright.

WHITE PERFECTION—The grandest white, and most prolific bloomer, of enormous size; full and double.

WHITE ENCHANTRESS—A pure white sport from the famous variety Enchantress, having the same general habit and characteristics. A superb flower.

WINSOR—This variety has been greatly admired wherever it has been seen for its desirable color, being a beautiful delicate shade of pink; flowers of large size and very freely produced; plant of grand habit and vigorous growth.

WINONA—Fine free-blooming variety, possessing size, fragrance and desirable color. Glistening rose-pink flowers on stout, straight stems.

Florists write for prices on Carnation Plants. We can supply best commercial varieties in season, or will grow to your order, any special variety. Large, healthy, well-rooted plants at right prices.

FEED YOUR PLANTS --- Diamond Plant Food is the proper diet, makes them grow, improves their color and lasting qualities. A 25c package feeds a dozen large house plants a whole year--See page 45.

Flowering Begonias

Price 10c. each; set of 6 sorts, 50c. Postpaid

ARGENTEA GUTTATA—Handsome erect growing sort, with pointed wine-colored leaves with silvery white spots, clusters of pure white flowers on the tips of the stems.

CUPREA—A fine, erect Begonia, with dark, rough leaves. The panicles of unopened flowers are bright red with surfaces like plush.

FOLIOSA—The freest-flowering Begonia we have. Makes a handsome window plant, with its glossy green leaves and bright pink flowers.

INCARNATA—A strong, vigorous growing sort, bearing immense pendants of pretty pink flowers. A splendid Winter-blooming variety for the house.

GRACILLIS LUMINOSA—A fine new Begonia of the Semperflorens type. Bright scarlet flowers cover the plant from the ground up. Good house plant.

MARGUERITE—Bronzy green, with purple cast; large trusses of cream and rose-colored flowers.

REX BEGONIA

Grown for the beauty of their foliage. The leaves are large, variegated and margined with a peculiar silver-metallic gloss. The most ornamental of window plants; also useful in baskets and vases. We offer twenty of the most distinct and handsomely marked varieties. Price, large plants, 25c each.

Choice Double Fuchsias

Price: 10c each; set of 6 sorts, 50c. Postpaid.

ANNA EARLE—Tube and sepals waxy white; corolla single, clear carmine; plant of splendid and free blooming.

DR. BROOKS—Rich, dark blue corolla, with crimson petals. A beautiful variety.

JUPITER—This is a grand mammoth double flowered Fuchsia; flowers of enormous size, very large, rich purple violet corolla; tube and sepals bright crimson.

MOLESWORTH—Fine, large and elegant form, sepals long and reflexed, pure red; corolla large double white.

TRAILING QUEEN—Of a drooping or trailing habit; a fine plant for hanging baskets, vases, etc.; tubes and sepals rosy scarlet; corolla violet purple.

WHITE GIANT—Superb double white variety; tube and sepals bright scarlet; corolla large, double and waxy white; an excellent grower and profuse bloomer.

Fringed Petunias

Price: 10c each; seven sorts, 60c; fourteen plants, any variety, \$1.00.

Double

ARTUS—Large double flowers of a bright solferino red. Nicely fringed.

CHAMPION—A unique and beautiful variety, light lavender-pink with white edges, veined and marbled with brownish crimson.

MAJESTIC—An extra large, fine double fringed variety; deep violet-crimson with a velvety finish.

PINK BEAUTY—A lovely shade of light, clear pink; one of the most beautiful yet raised.

SNOWBALL—For purity of color, form, size and vigor of growth, this variety is unsurpassed in double white Petunias.

WONDERFUL—A distinct shade of heliotrope beautifully fringed.

Single

IRVINGTON BEAUTY—Not a double Petunia, but the most beautiful single variety we ever saw. Covered all Summer with beautifully fringed flowers of a soft silvery pink, color shaded and veined creamy yellow in the throat. This fine sort is being used extensively in Portland for bedding. Makes a fine showing in the border. Plant a bed or row of this one variety or use it in your porch boxes.

New Heliotropes

Price 15c each; set of 4, 50c. postpaid.

ALBATROSS—Elegant dwarf, bushy growing, new variety of great merit; large panicles of pure white flowers in great profusion all season; the best white variety to date.

HEAVENLY BLUE—Large, close panicles of exquisite light blue flowers, with a white eye. Grows vigorously and flowers abundantly; very fine for bedding, for which purpose we offer it at \$1.00 per dozen.

LAVENDER QUEEN—Enormous florets, very large trusses of bloom; color, a beautiful shade of lavender, suffused with rosy mauve. A dwarf, robust grower and very free and continuous bloomer.

ROYAL PURPLE—Very large and fragrant; color, deep violet purple, with white eye; very floriferous and can not be too highly recommended for bedding, for which purpose we offer it at \$1.00 per dozen.

Sweet Violets

Price each, 15c; 6 sorts, 75c. Postpaid.

ALASKA—A grand sort, well adapted to garden culture, enormous double flowers of a deep blue-black color and powerful fragrance.

LADY HUME CAMPBELL—Large double flowers of a beautiful light blue color; very free-blooming and exquisitely fragrant.

CALIFORNIA—Very showy and beautiful flowers of enormous size, deep violet blue; deliciously fragrant; single.

PRINCESS OF WALES—Flowers single, of gigantic size; color a very rich shade of blue, and extremely fragrant.

MARIE LOUISE—A constant bloomer, producing great quantities of large, double flowers, lovely deep violet purple.

SWANLEY WHITE—The finest and best double white violet in cultivation.

DIAMOND LAWN GRASS MIXTURE—Makes an Evergreen Velvet Turf
Write for Prices in Large Lots.

Superb New Japanese Chrysanthemums

Price: 15c each; set of 10 sorts, \$1.25. Postpaid

ADONIS—Immense globes of silvery pink, narrow petals reflexing and interlacing most beautifully and forming an enormous flower of great depth. Of silky finish.

CHARLES RASER—Elegant show-white incurved blooms of fine size and build. Comes on long stout stems grandly clothed with luxuriant foliage. One of the finest new sorts.

C. H. TOTTY—Large, fluffy flowers of a glowing chestnut scarlet; reverse of petals shaded gold. This grand sort impresses us as being the very finest red variety to date. Simply superb.

CROCUS—Very large, broad petaled flower of a delightful canary yellow color. Nicely incurved and possesses a fine growing habit with handsome foliage.

MATCHLESS—Largest and most beautiful dark crimson scarlet yet raised; looks like crimson velvet; the color long desired. Superb in the garden.

MRS. WM. ARNOLD—Immense white globes as deep as wide. Petals broad twisting and curling into a most beautiful flower. One of our finest exhibition varieties.

POLYPHENE—A gem in every sense of the word; magnificent in size, form and color. Its informal character of build and rich canary yellow color need only to be seen to be appreciated.

THANKSGIVING QUEEN—Large broad reflexing petals opening in a globe-shaped flower of fine size and build. Color creamy white.

UNAKA—A grand new incurved Japanese variety of a beautiful silvery rose color. One of the most beautiful pink sorts in cultivation.

WELLS PINK—Another superb new pink variety bearing profusely large flowers of a fluffy reflexed form. Grand foliage and stem. A fine cut flower variety.

Twelve Finest Exhibition Chrysanthemums

Price, 10c each; set of 12 sorts, \$1.00. Postpaid

BRUTUS—Beautifully formed flowers of a rich chestnut red, reverse of petals gold. One of the finest dark colored varieties.

DIRECTOR GIRARD—Rich tawny yellow and golden bronze; very large reflexed petals. One of the finest for exhibition.

CLEMENTINE TOUSSET—Creamy white, delicately laced with lilac and lavender; petals beautifully twisted and arranged. Fine large flower.

COLONEL APPLETON—Rich golden yellow, immense size, very double; a grand, well-built flower, with splendid stem and foliage. A sure prize-winner.

DR. ENGUHARD—Flowers delicate pearl-pink; large, beautifully incurved; very double and of exquisite form.

GEORGE W. CHILDS—Largest and most beautiful dark crimson scarlet yet raised; looks like crimson velvet; the color long desired.

MAJOR BONNAFFON—Soft, clear yellow, full in the center, eight inches in diameter and nearly as deep; perfect form.

MRS. HENRY ROBINSON—Snowy white, of perfect incurved form, very large; this is undoubtedly one of the most useful varieties ever introduced.

NIVEUS—Large, pure white reflexed flowers of great substance. Petals extremely broad and unfolds in a most artistic manner.

PATTY—Pearly pink, brighter in the depths; very early; incurved Japanese, of large size and splendid proportions.

THE QUEEN—Broad, heavy, incurved petals, of snowy whiteness. A queen among Chrysanthemums.

TIMOTHY EATON—The largest globular Japanese incurved variety yet raised. Form, round and perfect; color, creamy white; growth, vigorous, with large, dark green foliage.

Palms

Choice Palms for Table and House Decoration.

PHOENIX ROEBELENII—A new and graceful miniature "Phoenix" fully equaling in beauty the Cocos Weddeliana, and having the advantage of being as hardy as the Kentia. Of vigorous, bushy growth, with dark green recurving foliage. An admirable house plant. **Price, choice plants from 4-inch pots, 60c to \$1.00.**

KENTIA BELMOREANA—A beautiful, handsome looking, strong growing Palm with deep green, crisp foliage; inclined to dwarf and spreading habit; one of the most popular for house culture, as they are very hardy. **Small plants, 50c to 75c. Large plants, 18 inches up, \$1.50 to \$5.00 and up.**

COCOS WEDDELIANA—The most graceful of all Palms; finely cut foliage of rich deep green; we have fine plants of this most desirable Palm, well established in 4-inch pots, 5 to 7 leaves. **Each, \$1.00. Nice specimen plants, \$2.50 up.**

LIVISTONIA ROTUNDIFOLIA—A miniature fan leaved Palm, having almost a globular form in well grown specimens. Beautiful for table; thrive well in the house. **Price, from 4-inch pots, 75c.**

THRINAX RADIATA—An attractive graceful species with palmate leaves narrowly divided. **Price, from 4-inch pots, 75c.**

RHAPIS HUMILIS—Rare ornamental Palm with slender, graceful leaves; very handsome and attractive; an excellent decorative variety, requiring very little sun. **Each, \$2.50 to \$5.00.**

"DIAMOND PLANT FOOD" for Palms and Pot Plants. **½ lb. Pkg. 15c; 1 lb. 25c.**

Dracaenas

D. INDIVISA—This is the popular hardy Dracaena that is used so extensively for centers of vases, baskets, boxes, etc. Of graceful form, and stands full exposure to sun. 4-inch pots, 35c 5-inch pots, each, \$1.00.

D. FRAGRANS—Foliage broad, color, rich dark green; makes a splendid house plant; requires no special attention. 5-inch pots, each \$1.00.

 **FOR ARAUCARIA, ASPIDISTRIS, RUBBERS, DWARF TREES and Decorative Pot Plants**
see Autumn Catalog, or send in your order. Satisfaction Guaranteed.



WE offer a splendid list of Ferns, including some of the newest varieties as well as the older sorts. All plants are in fine growing condition, and well rooted. Florists wishing stock of the new varieties write for prices.

Nephrolepis or Boston Ferns

N. AMERPOHLII—This charming "Lace Fern" is so finely "crested" as to have a fluffy lace-like appearance that makes it the most beautiful and attractive "sport" that has yet been developed from the Boston Fern. The growth is rather dwarf and bushy, making an ideal plant for house or table decoration. **Price from 4-inch pots, 60c**

N. SCHOLZELI—The crested Scott Fern. Makes a dense, compact growth; is finely crested and of dwarf habit; stands erect with gracefully arching fronds making beautiful specimens in small as well as large plants.

from 4-inch pots, fine well-rooted plants, 60c postpaid.

BOSTON FERN—This is the original and well known type of "Sword Fern", so popular as a hardy house plant. **Nice plants, each, 20c; large plants, each, 35c to 50c; specimen plants, \$1.50 to \$3.00.**

SCOTT FERN (NEPHROLEPIS SCOTTII)—Identical with the original Boston type, but is dwarfer with a more compact and bushy habit of growth. **Price, from 4-inch pots, 60c postpaid.**

OSTRICH PLUME FERN (NEPHROLEPIS WHITMANI)—One of the most wonderful and beautiful introductions of the present age; this new sort is a sport from the well known Boston Fern; has a beautiful feathery appearance, and is one of the grandest of decorative house plants. **Nice plants, 20c to 35c each; specimen plants, \$2.50 to \$3.00.**

SUPERBISSIMA—The most unique and distinctive fern. Color a deep rich green, very dense and erect habit; foliage finely cut and crested; succeeds splendidly under almost every condition and is a very desirable table decoration. **Price from 4-inch pots, nice plants, 60c.**

New and Popular Ferns

ASPARAGUS PLUMOSUS (CLIMBING LACE FERN)—A finer and more delicate plant than the Sprengerii, but hardy and easily grown; very satisfactory for window and house culture; the fronds retain their freshness for weeks when cut; fine for floral decorations.

Nice plants, each, 15c; large plants, 25c to 50c.

ASPARAGUS SPRENGERII (EMERALD FEATHER)

Handsome and valuable evergreen trailing plant for the house or conservatory; its beautiful sprays of lovely green, feathery foliage can be cut freely.

Nice plants, each, 15c; large plants, 35c to 50c

BIRDS NEST (ASPLENIUM NIDUS AVIS)—A rare and beautiful fern with broad outer leaves; center curiously formed like a nest; color is deep green; an attractive pot plant for exhibition. **Well-grown specimens from 4-inch pots, \$1.50, postpaid.**

MAIDEN HAIR (ADIANTUM CROWEANUM)—This is the hardy Maiden Hair Fern so valuable to florists for cutting, and must not be confused with the older sorts that cannot be successfully handled; this fern grows freely under almost any condition inside, and if you have not been successful with "Maiden hair" ferns as a pot plant try this one; it is a sure grower. **Good plants from 4-inch pots, \$1.00 postpaid.**

FOR FERN DISHES—Attractive assortments, sufficient for 5 to 6 inch pans. From 75c to \$1.00, postpaid.

Japanese Fern Balls

DIRECTIONS FOR STARTING—Place ball in water for 15 minutes, and then suspend in any desired position, or place in a shallow dish; repeat every two days until growth is started, after which sprinkle occasionally as required. They need very little sun.

Price of Balls in dormant state, large size, each 75c; small, 50c.

SPECIAL—Six Fine Table Ferns for \$1.00

Price 20c. each 6 sorts for \$1.00. Extra large plants 40c. each.

ADIANTUM CUNEATUM—Maiden Hair Fern. A very beautiful and graceful fern.

ASPIDIUM TAUSSIMENSE—Without question the most valuable of all ferns yet introduced for fern dishes; of strong but dwarf and graceful habit.

BOSTON FERN—See description above.

CRYPTOMIUM FALCATUM (The Holly leaved fern).—One of the most desirable; with hardy, dark green foliage.

PTERIS RETICULATA ALBO-LINEATA—A pretty and useful variegated variety, distinctly showing the clear white variegation.

OSTRICH PLUME—See description above.

 We can supply any of the above in all sizes from 2 1/2 inch pots up to large specimen plants. Prices, from 35c to \$3.00 each.

GERANIUMS

THE popular demand for Geraniums has encouraged us to provide an ideal collection of superb new varieties which we know will be appreciated by our customers. To repeat the words of a famous grower, "We believe in Geraniums." They grow beautifully throughout the year, making cheery house plants, and are our finest bed and border plants. No other flower has a wider range of usefulness.

10 Rare New Single Geraniums

Price: 15c each; set of 10 sorts, \$1.25.

BELLEROPHON—One of the freest blooming single scarlet bedding varieties; rich, glowing scarlet, crimson maroon shading on upper petals.

GABRIEL MONTOYA—A most distinct and striking shade of reddish purple; large, round, full flowers; immense trusses; free flowering; strong, robust grower and grand habit.

HALL CAINE—Brilliant orange scarlet, suffused rose; a unique and charming self color, flower of giant size; grows well, is free blooming and desirable either as bedding or pot plants; one of the finest Geraniums ever grown.

MAXINE KAVOLESKI—Odd shade of orange red; very distinctive, splendid bedder, vigorous, handsome, a dependable sort.

MME. MOSNAY—Beautiful shade of Geranium lake; upper petals shaded violet to a white center; flowers freely produced in enormous trusses; clean, strong, robust, healthy grower.

MAD. CHAPOTAN—Delicate light pink; large flowers of good habit, nice foliage; specially desirable as a pot plant.

MME. J. CIBIEL—A magnificent variety; enormous trusses of large florets; the center of each petal is a soft light salmon bordered with rosy salmon; habit exceptionally strong and vigorous.

METEOR—A continual bloomer of a brilliant crimson red flower; dwarf compact habit of growth; very highly recommended and we predict for it a great future.

TEODOR DE WYZEWA—Cheerful clear shade of rich lilac rose with blotch on upper petals; strong branching semi-double growth.



SNOW-DROP

SNOWDROP—Pure snow white; enormous trusses; perfectly formed flowers, held well above the beautiful foliage.

10 Rare New Double Geraniums

Price, 15c. each; set of 10 sorts, \$1.25.

EDMOND BLANC—Semi-double; deep carmine, red tinged violet, with large white eye. We have found this to be one of the finest new sorts out.

DR. PHILLIPE TISSIE—Robust grower; large trusses borne on long stems; light crimson, shaded through magenta to grand white center. Beautiful and striking.

GENERAL GRANT—Bright vermillion scarlet; full, round florets, borne in large trusses on long stems.

GENERAL SAUSSIER—An exquisite shade of bright carmine fading through delicate lilac to a large distinct white center; an extraordinary attractive variety.

MADAME BUCHNER—Color pure white; very large, handsome, rich green foliage, zoned with dark green; growth dwarf, vigorous and compact.

Geraniums for Pots and Bedding

SIX FINE SINGLE GERANIUMS

Price, postpaid, 10c. each; set of 6 sorts, 60c.

ANDREW LANG—Very large, full trusses of bright velvety scarlet flowers; upper petals heavily shaded with white towards the center.

GERTRUDE PEARSON—Flowers bright pink, upper petals shaded to white.

JAMES KELWAY—Brilliant scarlet, of the most dazzling shade; very large trusses and florets.

MRS. J. M. GARR—Trusses large and of perfect form; color pure snowy white.

MRS. A. BLANC—Light salmon, blended with darker shades; center and edge of petals pure white; extra fine.

SAM SLOANE—An extra fine velvety crimson maroon carrying immense trusses.

SIX FINE DOUBLE GERANIUMS

Price, postpaid, 10c. each; set of six sorts, 60c.

FRANCOIS MAGNARD—Fine, bright magenta shade, flowering very freely in large trusses of well-opened flowers.

FRANCIS PERKINS—The finest pure pink variety we know of.

JOHN DOYLE—Very large and full trusses of double bright, velvety scarlet flowers.

LA FAVORITE—Trusses very large; flowers pure snow white.

MME. JAULIN—A truss of grand size, delicate pink, bordered with pure white.

S. A. NUTT—The best of the rich, dark crimson varieties; trusses massive.

Ivy Leaved Geraniums

THIS class of Geraniums has a trailing or vining habit and are unexcelled for baskets, vases and window boxes, as well as for planting in the open ground where they will cover the soil very quickly with their deep green, ivy-shaped leaves and brilliant colored flowers.

PRICE 15c EACH; SET OF 6 SORTS, 75c.

BALLADE—Semi-double flowers in large trusses; color, tender lilac feathered crimson.

COL. BADEN POWELL—Beautiful double blush white flowers in splendid trusses.

CHAS. TURNER—Deep bright pink, approaching scarlet in color. The upper petals feathered maroon.

GARDEN GLORY—Bright scarlet, upper petals veined crimson.

MME. THIBAUT—Large flowers in trusses of a beautiful shade of pink.

RYECROFT SURPRISE—Lovely flesh pink flowers of largest size. A fine variety from England.

LILIES—Japan

AFTER bulbs are set out they should remain undisturbed for five or six years. They will increase in size, beauty and number of flowers, with practically no attention, our coast climate being perfectly suited to their requirements, and once established, they rival the famous product of Japan.

Planted outdoors during the fall or early spring they flower each year from June to October. We have selected the finest types that bloom freely and in the various kinds listed below you will find Lilies suitable for every purpose.

EASTER
SUNDAY
Mar. 23d
1913

Lilium Formosum

LILIUM FORMOSUM. The best of the Longiflorum, being early, free flowering and free from disease.

Mammoth bulbs..... Each, 20c; doz., \$2.00.
Large bulbs..... Each, 15c; doz., \$1.50.

Lilium Longiflorum—Giganteum

Of grand size and substance; superior to the Multiflorum, but forces a little later; especially fine for open ground.

Mammoth bulbs..... Each, 20c; doz., \$2.00.
Large bulbs..... Each, 15c; doz., \$1.50.

Lilium Longiflorum—Multiflorum

Much like the Lilium Harrisii, not quite so early, but the flowers are of better substance. When grown in the open ground they bloom in June and July. Can be planted in the Spring or Fall.

Mammoth bulbs..... Each, 20c; doz., \$2.00.
Large bulbs..... Each, 15c; doz., \$1.50.

Lilium Speciosum

No words can overstate the brilliant beauty of this charming class. Its six broad white, or pink petals thickly dotted with rose or carmine spots, and the graceful form, brilliant color and exquisite fragrance make this one of the most effective and desirable of the Lily family. They are profuse bloomers and last for days after being cut and put in water.

SPECIOSUM RUBRUM—White with dark rose spots.

Mammoth bulbs..... Each, 25c; doz., \$2.50.

Large bulbs..... Each, 20c; doz., \$2.00.

SPECIOSUM RUBRUM MELPOMENE—White, shaded rich blood crimson, heavily spotted; very rich and showy.

Mammoth bulbs..... Each, 25c; doz., \$2.50.

Large bulbs..... Each, 20c; doz., \$2.00.

Tiger

TIGRINUM SPLENDENS (Improved Single Tiger Lily)—Has very large flowers of excellent form; color orange-salmon, with dark spots; hardy and a free bloomer.

Mammoth bulbs..... Each, 15c; doz., \$1.50.

Large bulbs..... Each, 10c; doz., \$1.00.

NEW LILIUM MAGNIFICUM. This new Lily is the most magnificent of the wonderful Speciosum Lilies. It is of the Rubrum variety, closely allied to Speciosum Melpomene, but of much richer color and grander size.

Price, each, 40c; doz., \$4.00.

SPECIOSUM ALBUM—Pure white, flowers freely.

Mammoth bulbs..... Each, 30c; doz., \$3.00.

Large bulbs..... Each, 20c; doz., \$2.00.

Lilies

TIGRINUM FLORE PLENO (Double Tiger Lily)—This is a magnificent lily of stately habit, bearing immense clusters of very large double flowers on tall, strong stems; color bright orange red, spotted with black.

Mammoth bulbs..... Each, 30c; doz., \$3.00.

Large bulbs..... Each, 20c; doz., \$2.00.



GLADIOLI

THE newer types are of immense size and exquisite coloring, their grace and attractiveness, ease of cultivation and freedom of bloom is making them universal favorites. They come at a season when there are few other flowers and everyone should grow them.

CULTURE—Gladioli may be planted as early as the ground can be worked or as late as June. A sunny situation is preferred. Plant to a depth of 3 to 6 inches, depending on the size of the bulb. Largest bulbs are not always best, as some varieties do not produce large bulbs. Any garden soil will give satisfactory results, but if well enriched, cultivated and freely watered when buds first show, Gladioli will amply repay you for this additional care. If cut when the first bud opens and put in water, the flowers will open perfectly, keep for many days, and the coloring is richer, and more delicate than if left to open on the plant.

New-NIAGARA

A Splendid Novelty for 1913

A grand new Gladiolus of the "America" type, the color being a lovely deep cream shading to canary yellow on the two lower inside petals. The giant flowers measure four and a half inches across and are carried on a large, erect spike. They open freely and contrast beautifully with the broad, dark green foliage.

"NIAGARA" is the finest yellow and won certificates of merit from the Massachusetts Horticultural Society, Boston, and the Dutch Bulb Society of Haarlem, Holland. Also won the open class award of the American Gladiolus Society for the best yellow. We offer choice bulbs in limited supply for introduction.

Each, 50c; per doz., postpaid, \$5.00.

New Giant Ruffled Gladiolus A distinctive type of genuine merit

"GLORY"—Color a delicate cream pink tint with an attractive crimson stripe in the center of each lower petal. The shade is new and the flower is indeed a glorious beauty.

Ruffled Gladioli have broad, expanded flowers, paired and face the same way, borne on strong stalks, 3 1/2 feet high, from 4 to 8 flowers open at the same time, petals are exquisitely ruffled and fluted, giving the flower a refined, graceful appearance.

Price, each, 20c; doz., \$2.00.

 Our stock of "America" was grown by Mr. Crissey at Bull Run, and critics who saw the flowers exhibited at the Portland Chamber of Commerce pronounced them the finest and best colored "America" they had ever seen. We offer this stock at the Special Low price of \$1.00 per doz.; \$5.00 per hundred



"America"
Most
Popular
Gladiolus

12 Rare and Beautiful New Gladioli

SPECIAL—Entire Collection 12 Bulbs, \$2.25, postpaid.

AMERICA—Exquisite shade of flesh pink tinted lavender. A grand giant flower, hardy and free blooming.

Special price, 10c; doz., \$1.00; C, \$5.00.

CONTRAST—Intense scarlet with pure white center; one of the grandest, most attractive new flowers.

Price, postpaid, each, 35c; doz., \$4.00

PRINCEPS—Giant flowers of richest, most brilliant crimson, with fine white blotch on lower petal; the most striking and beautiful of the newer Gladioli; a great favorite with florists.

Price, each, 20c; doz., \$2.00

DAWN—An elegant rose-colored flower with large, clear white center, a most beautiful new Gladiolus.

Price, postpaid, each, 20c; doz., \$2.00

WILD ROSE—Bright rose or blush tint, of rare beauty; large, free-flowering; forces well.

Price, each, 20c; doz., \$2.00

BLUEJAY—The only true blue Gladioli; a dark indigo shade; very popular.

Price, postpaid, each, 15c; doz., \$1.50

BLANCHE—A splendid large white flower with but faint markings. One of the best.

Price, each, 20c; doz., \$2.00

HARLEQUIN—White-striped and suffused with rich dark crimson.

Price, each, 25c; doz., \$2.50

CANARY BIRD—A pleasing bright yellow.

Price, each, 10c; doz., \$1.00

MRS. FRANCES KING—A pleasing light scarlet; fine for forcing.

Price, each, 10c; doz., \$1.00

NUMBER 97—New. An unnamed seedling of a pure glistening white with small carmine mark; flowers are of fine form on strong, straight spikes.

Price, each, 15c; doz., \$1.50

GOLDEN QUEEN—New. Bright cream, with clear cut diamond blotch of carmine; does not fade; a wide open flower of fine quality.

Price, each, 15c; doz., \$1.50

GLADIOLI—Continued**Select Named Gladioli, Best of Their Color****SPECIAL—Collection of 8 Varieties, 70c Postpaid**

MAY—Lovely pure white flowers of finest form, with edges flaked crimson.
Price, each, 10c; doz., \$1.00

MME. MONERET—Grand spikes of large delicate rose flowers, with deeper shadings; A fine cut flower.
Price, each, 10c; doz., \$1.00

AUGUSTA—Lovely pure white; blue anthers.
Price, each, 10c; doz., \$1.00

ATTRACTION—Deep crimson, white center.
Price, each, 10c; doz., \$1.00

Mixed

DIAMOND MIXTURE—Select named varieties with choicest Childsi Hybrids.

Doz., \$1.00; 100, \$5.00

GLADIOLI CHILDSSI—Of grand size and color, very showy, containing a large per cent of red and dark shades.
Doz., 75c; 100, \$4.00

GLADIOLI, FINE MIXED—This mixture will produce a large variety of fine flowers unequalled for the price.
Doz., 50c; 100, \$3.00

I. S. HENDRICKSON—Large, beautiful flowers, mottled, white and pink; variable.
Price, each, 15c; doz., \$1.50

BRENCHLEYENSIS—Rich vermillion, shading to scarlet.
Price, each, 10c; doz., \$1.00

KLONDYKE—Light yellow, crimson maroon blotch.
Price, each, 10c; doz., \$1.00

SUPERB—Enormous pink, flaked and striped salmon.
Price, each, 10c; doz., \$1.00

Gladioli

GLADIOLI, GROFF'S HYBRIDS—A mixture of Hybrids of all sorts, giving in one bed the greatest range of colors and variations.

Doz., 50c; 100, \$4.00

GLADIOLI LEMOINEI—Mostly light shades, odd and fantastic markings. Brilliant and showy.

Doz., 50c; 100, \$3.00

LILY OF THE VALLEY**Extra Select Berlin Pips.**

One of the most satisfactory and charming Spring flowering plants, producing in profusion its delicate bell-shaped, delightfully fragrant, white flowers. Valleys thrive in any common soil, are perfectly hardy, and will succeed in shady situation. They can be left undisturbed in the open ground, where they will increase from year to year, and are most charming in beds or borders around the lawn. For outdoor planting and Winter forcing, pips and clumps are ready November to March.

SELECTED PIPS, for forcing indoors or planting outside.
Each, 5c; doz., 40c; 100, \$2.50.

STRONG CLUMPS, for outdoor planting.
Each, 30c; doz., \$3.00.

NOTE.—Clumps can only be sent by express or freight at buyer's expense.

**Washingtonianum
(Mt. Hood Lily)**

A beautiful Lily, native of Oregon; flower large, of open form, white, tinted with lilac; grows 3 to 5 feet high; very fragrant.

Choice bulbs **Each, 25c; doz., \$2.50.**

CALLA LILIES**Lily of the Nile**

CALLA AETHIOPICA. Our well known White Calla in its rare and stately beauty has few equals as a pot plant, and nothing is easier to grow. Plant one bulb to 6-inch pot, give an abundance of water, light and heat, and the result will be most satisfactory.

We offer dry roots (from September on), as they are superior for forcing and winter flowering purposes. They come into bloom quickly.

First size bulbs **Each, 15c; doz., \$1.50.**
Extra size bulbs **Each, 20c; doz., \$2.00.**

Arum Sanctum

THE BLACK CALLA—A rare and interesting plant, grows well and flowers freely; always attracts much attention. **Each, 40c; doz., \$4.00.**

Calla Elliotiana

YELLOW CALLA. The finest of the yellow Callas, growing to perfection under ordinary pot culture. Treat same as White Calla. Flowers are a deep rich golden yellow, 4 to 5 inches in diameter, and last a long time after opening. Foliage is a beautiful deep green, spotted silvery white; a grand novelty. **Price, each, 50c; doz., \$5.00.**

Water Lilies

THESSE beautiful and interesting plants can be easily grown in tubs

made by cutting a barrel in half and setting one or both halves deep in the ground, to within a few inches of the top. Put in good loam soil, with one-third old manure, or better still is the soil from a swamp or lowland, using one-third of old well-rotted manure; cover soil with a layer of sand one to two inches deep, allowing for a depth of six inches of water.

Water Lilies like a mild temperature, and still water, and will not succeed where a fountain is playing or where there is a strong or cold inflow.

NYMPHAE—Hardy white.

Single roots, 35c, postpaid

Large roots, 75c to \$1.50, prepaid

NYMPHAE—Hardy yellow; fragrant.

Single roots, 50c, prepaid

Large roots, \$1.50, prepaid

Parrots Feathers

Produces long trailing sprays of lovely green, finely cut foliage set in symmetrical whorls; plant in a water tight vase or hanging basket, keeping water standing over the surface. A beautiful, thrifty growing, hardy plant. Try it. **Good roots, each 25c; doz., \$2.50.**

**WATER-LILIES**

**And How to Grow Them
228 Pages |**

**\$1.10
Postpaid**

BE SURE TO TRY OUR OREGON GROWN "AMERICA" AND MRS. FRANCIS KING GLADIOLAS.

DAHLIAS

THE NEWER TYPES OF DAHLIAS are considered to be the most wonderful and interesting of all flowers, having the widest range of colors in every shade and variation with the one exception of blue, and appear in more varied and marvelous forms than any other class of flowers.

FOR AUTUMN FLOWERS, nothing equals Dahlias. They are easily grown, requiring no special soil or treatment and bloom profusely until cut down by frost.

IN THE SELECTION OF DAHLIAS only those varieties of known merit should be considered. The great Dahlia Specialists of Europe and America have set a high standard, established by their years of comparative trials and you will have greater satisfaction, and better values from their tested varieties which we offer, and which have been officially recognized, than you can possibly obtain from untried varieties of doubtful origin.



*Princess Juliana
The ideal white dahlia.*

OUR TRIALS ARE VERY EXTENSIVE and are conducted by a practical Dahlia expert of wide experience. All tests are made in the field without irrigation and the Dahlias we list represent the "survival of the fittest" the best of the standard varieties and meritorious novelties of the most famous producers, varieties that are recognized the world over. They are true to name, erect bloomers and good keepers.

IT IS IMPORTANT that your Dahlias be recognized varieties and **true to name**, if not you cannot hope to exhibit them successfully.

CULTURE

DAHLIAS will grow to perfection in any good garden soil, preferably one that contains a little sand. Plant as soon as the frost is gone and the ground warm, cutting the tuber to a single strong eye, and placing it on its side at a depth of about 6 inches, in ground that has been previously well cultivated. An excellent way to start Dahlias is to sprout the tuber in a green house and set out the rooted plants. These are generally believed to give more and better flowers, but is more trouble than planting the bulbs. Rows should be four feet apart, plants 18 inches to 3 feet apart in the row, depending on whether planted for a hedge or for specimen plants. Cultivate thoroughly until ready to bloom, then deep tillage must cease and only the surface be lightly stirred, as deep cultivation at this time is fatal to blooming. Tall varieties should be staked.

If you use commercial fertilizer, do not apply until the plant starts growth, then work it into the top soil, 5 or 6 inches from the plant. Bone meal is an excellent fertilizer for Dahlias but must be applied early, as it is slow in action. When the plant is well up, say 6 to 10 inches, pinch off the top, leaving two or three joints. This will cause it to branch out into a more sturdy, bushy growth. Water freely.

New Dahlias for 1913

12 Splendid Dahlias for Garden or Exhibition

We have chosen the following varieties after careful comparative tests. They are all recent introductions and represent the greatest improvements in their class and colors. They have won fame for their originators and should win for you.

Price **Entire Collection** **\$6.50 Postpaid**
12 Bulbs or Plants

PRINCESS JULIANA New White Decorative.

PRINCESS JULIANA, originating in Holland, received a special award of merit at the Royal Horticultural Society's show in London, and is the most beautiful and useful white Dahlia; flowers are pure white, of perfect form; foliage is rich dark green. A splendid grower and profuse bloomer, the magnificent flowers carried on long, strong stems, will keep for four days when cut.

Plants or tubers, each, \$1.00

GELBER PRINZ—Cactus—A grand new yellow of Marechal Neil shade, a color never before obtained in a Dahlia. Flowers are extra large, of graceful form, full centers, carried on large stems and keep better than any other Dahlia, both cut and on the bush.

Each, \$1.00.



Our Dahlias were awarded the Blue Ribbon at the Dahlia Show of the Portland Floral Society, 1912.

NEW DAHLIAS -Continued

MARIE PURRIER—**Cactus**—Extra large brilliant blood-red flower of fine full form, with slender dainty incurved petals; a free bloomer of fine habit of growth, flowers erect and good keepers; a European dahlia of the greatest merit.

Price, 75c.

THE BRIDE—**Cactus**—A distinctive novelty and the daintiest, most beautiful dahlia in its class. "The Bride" is a pure glistening milky white of great substance and of full rounded symmetrical form, grows erect, keeps well cut and the golden variegated foliage is very attractive. A vigorous, free bloomer

Each, 75c.

GALATHEA—**Cactus**—A delicate soft flesh pink of finest form; a flat petaled type listed in the cactus class by the originator. Galathea is pleasing and most desirable addition to its class.

Each, 75c.

BISMARCK—**Cactus**—A most intense bright red petals slightly incurved perfect cactus type, has fine carriage of bloom well above the foliage, is an early and continuous bloomer always covered with flowers, one of the very finest reds.

Each, 60c.

MRS. CHAS. FOSTER—**Cactus**—A beautiful lilac rose with deeper center; full well formed true cactus type with long graceful petals. A splendid grower and good bloomer.

75c.

AUGENWEIDE — **Cactus** — Translated this means "a feast for the eyes," and truly this beautiful cactus dahlia is all its name implies. Color is bright rose with deep rose center, grows erect on fine stems and is a full shaped flower.

Each, 60c.

RHEINKOENIG—**Cactus**—(King of the Rhine) Dazzling snow-white of magnificent form and largest size; although large the flowers are daintily formed and of splendid substance, carried above the foliage on fine long stems, and are very lasting when cut.

Each, 50c.

GWENDOLINE TUCKER—**Cactus**—A dainty rose color with lighter center, a finely formed, full flower, petals incurved, carried on long, strong stems. An exhibition variety.

Each, 50c.

JOHN PEEL—**Cactus**—A deep rich crimson with lighter suffusion toward center; a distinctive form of true Cactus type, a splendid keeper, with fine stems.

Each, 75c.

WODAN—**Cactus**—Magnificent flowers of largest size and pleasing form, color orange rose shading to old gold center, very vigorous

Each, 35c.



PRICES

15c DAHLIAS \$1.50 dozen;
35c DAHLIAS \$3.00 dozen;

20c Dahlias \$2.00 dozen;
40c Dahlias \$4.00 dozen;

25c Dahlias \$2.50 dozen
50c Dahlias \$5.00 dozen

10 New Cactus Dahlias of Special Merit

THIS collection, introduced from Europe, is the best value in rare new Cactus Dahlias that has been offered. They are all erect growers, free bloomers, and good keepers when cut.

Price: Entire collection, 10 varieties, \$3.00; single plants or roots, each 40c, postpaid.

MODELL—A beautiful clear waxy yellow, with a delicate plum blush sheen over tips of petals; a dainty, lovely flower of large size, perfect form, petals incurving, erect on long stems; one of the best bloomers and most vigorous growers.

MAUVE QUEEN—A beautiful true lavender with lighter center, full flower with finely quilled petals beautifully formed, incurved.

OTHELLO—A glorious full, large flower of deepest richest crimson, center almost black; finest true cactus form; one of the earliest.

VULCAN—A brilliant fiery vermilion, or orange scarlet, a veritable "hedge of fire," one of the most profuse bloomers, rivalling the Countess of Lonsdale. Vulcan is the ideal hedge Dahlia.

GENOVEVA—An elegant distinctive flower of a pale canary yellow, with a beautiful faint greenish tinge suffusing the entire flower, which is large, with well filled incurving petals.

DORNROSCHEN—Unique and remarkable, variable from carmine to brilliant red, to delicate pinks with blush suffusions; a dainty, perfectly formed, fully double flower; long slender petals, beautifully incurved and quilled; large and free blooming; long stems, erect; compact bush.

DESDEMONA—An exquisitely beautiful, daintily formed flower. The central shade is a lovely creamy canary shading to white at the ends of the slender, in-curved petals; flowers very full, erect, borne on long stems.

LILY SEISMEYER—A rare shade of deep orange buff, with rich light yellow center; a very unusual and beautiful combination.

HARMONIE—A fine full flower, chamois yellow center, outer petals a soft salmon red with lighter tips.

WEISSE DAME—A valuable new white of splendid form; large, full, petals curved and twisted.

FINEST CACTUS DAHLIAS

From comparative tests in the field we have selected the following as being the best of their types and color. This list contains many of the new Dahlias as well as the best of the older ones.

Write for Prices by the Hundred.

Red

BERLICHENGEN—New, deep crimson-carmine; brighter at tips; of the finest form and substance; a true cactus type of rare beauty; very floriferous. **Each, 25c.**

BURBANK—Deep rich cardinal red, of finest form and substance, full and free blooming; best of its color. **Each, 25c.**

MATCHLESS—Dark rich crimson. **Each, 20c.**

PROGENITOR—Bright carmine; fringed petals, new variety of great beauty. **Each, 20c.**

ROLAND VON BERLIN—A fine scarlet of great brilliancy, flowers full and erect; long stems; one of the best. **Each, 35c.**

ROTHER—Dark rich crimson, very early and free flowering, of vigorous erect habit; bush rather dwarf; flowers of the largest size; perfect cactus type. **Each, 20c.**

SIGNAL—Brilliant crimson scarlet; height 24 inches; flowers large, of fine form; free blooming. **Each, 35c.**

DR. JAMESON—A pleasing dark purplish red, petals rather broad; good, free blooming, desirable Dahlia. **Price, each, 25c.**

DREADNAUGHT—A giant flower, of graceful form, full, with fine claw-shaped petals; color, deep crimson maroon; a good keeper and splendid flower for exhibition, being the finest of its color and class. **Price, each, 40c.**

Yellow and Shades

GOLD REGEN—True cactus type, twisted petals, deep bright yellow; long stiff stems; a splendid flower. **Each, 50c.**

CAPSTAN—Orange-scarlet and apricot; one of the finest for cut flowers; dwarf-habit, free-bloomer, large perfect flowers. **Each, 15c.**

MASTER CARL—Bright amber, of giant size and perfect form, immense petals, gracefully curved; free-blooming, distinctive. **Each, 35c**

MISS DOROTHY OLIVER—Pale primrose yellow; long narrow petals; fine form. **Each, 35c.**

STERN—Odd and beautiful; star shaped; pure lemon-yellow flower; best yellow. **Each, 35c.**

PRINCE OF YELLOWS—Splendid lemon-yellow, free-blooming, finely formed. **Each, 20c.**

VATER RHEIN—Cactus—Handsome flowers, color a rich yellow suffused with salmon red, vigorous and free flowering. **Each, 35c.**

10 Finest Decorative Dahlias

A Magnificent Collection of the Best of this Superb Type—\$2.25 Postpaid

KAISSERIN AUGUSTA VICTORIA—Magnificent white flowers, of immense size and perfect form, borne erect on long stems. **Each, 35c**

LAVENDER QUEEN—Clear, soft lavender; petals deeply serrated. **Each, 15c**

ORANGE KING—Deep brilliant orange scarlet of finest form, full blooming. **Price, each, 25c**

NAVAJO—Rich, velvety red; splendid sort. **Each, 20c**

SOUVENIR DE GUSTAVE DOAZON—The largest Dahlia to date; often growing 9 inches in diameter; constant bloomer, magnificent rich scarlet color; the greatest of all Dahlias. **Each, 25c.**

MME. A. LUMIERE—Pure white with violet red points, good. **Each, 35c**

SYLVIA—Splendid pink; floriferous; keeps well. A good dry weather Dahlia. **Each, 15c.**

MRS. WINTERS—Snow white, large beautiful form. **Each, 20c**

LE GRAND MANITO—(Decorative)—Immense perfect flowers, color a white ground splashed and striped with deep violet red; the first variegated Dahlia in the decorative class. **Each, 40c.**

DELICE—(Decorative)—Lovely shade of pink, broad petaled flowers with large stiff stems, very floriferous. A fine, lasting cut flower. **Each, 50c.**

White

LAWINE—Fine large white, faint blush tint, erect, free-flowering; extra good. **Each, 35c.**

SCHWAN—The giant blooms of a pure glistening white with their narrow, twisted petals have a beauty and elegance not surpassed by any other variety. Blooms early. **Each, 35c.**

FAIRY—Beautiful clear white, narrow petals, fine form; one of the best; try it. **Each, 25c.**

Pink

UNDINE—Lovely light lavender pink of dainty form; a free bloomer. **Each, 25c.**

SABA—Bright true pink; a finely formed flower, petals rather broad. **Each, 25c.**

BRITTANIA—Beautiful salmon-pink. **Each, 25c.**

COUNTESS OF LONSDALE—Rich, rosy-salmon, very floriferous; one of the best. **Each, 15c.**

PINK PEARL—Deep rich pink; fine form. **Each, 20c**

KRIEMHILDE—Blush-pink; a prize winner; one of the finest new Dahlias. **Each, 20c**

HELENE—Delicate, clear pink, with rich creamy center, a beautiful flower on very long stems and the greatest bloomer of all. **Each, 35c**

TRAUTLEIB—**Cactus**—The dainty coloring of the large, twisted petals, shading from delicate rose with lavender suffusion, to an almost white center make Trautleib a most pleasing and desirable dahlia; a free and constant bloomer. **Each, 50c**

Variegated Shades

ASCHENBROEDEL—Orange-pink, distinct coloring; of great beauty of form, vigorous, free-flowering; one of the finest. **Each, 25c**

RELIABLE—A blending of yellow, brick-red and salmon; truly a grand flower. **Each, 25c**

EFFECTIVE—Chamois rose, yellow shadings. **Each, 25c**

COMET—Extra large, silvery rose, marked crimson, a very free bloomer, of good habit. **Each, 25c**

"DELICE"



New Paeony Flowered Dahlias

A list of the best varieties, including the most recent introductions.

THIS newest type of Dahlia, originating in Holland, comes to us with the endorsement of all of Europe. The blossoms are semi-double, of enormous size and the coloring is most brilliant and beautiful. They come in several pleasing forms generally with 3 to 5 rows of petals, which are long and broad, sometimes being beautifully curled and twisted

Paeony Dahlias bloom more freely than any other class and are very vigorous, growing to a height of 5 to 6 feet, with their flowers on long stems above the foliage.

CAESAR—New. This is the finest yellow of the Paeony section, a magnificent semi-double, clear bright yellow, flower of perfect form, borne erect on long stems; a vigorous grower and free bloomer. Height, 4 feet. Each, 50c.

GERMANIA—A rich, dark, velvety wine color with a suffusion of golden-yellow toward the edges of petals. Germania is free from the purplish tint that spoils other reds. Plants or tubers. Each, 35c.

GIANT EDELWEISS—This new type of Dahlia has true cactus petals of enormous length, curving inward at the tips; color a pure glistening velvety white, of great substance; the center is a brilliant golden yellow, forming a most striking contrast, producing a perfect duplicate of the famous Edelweiss of the Alps, on a gigantic scale, hence its name. Flowers are erect above foliage on long stems, a vigorous bloomer, 5 feet. Strong flowering roots or plants in season. Each, 50c.

GEISHA—Geisha has a rich, bright golden yellow ground color near center; suffused and heavily marked with clear bright red, shading toward points of petals into the clear yellow of the ground color; a beautiful deep golden center adds to the harmony of the color scheme which is the most striking and brilliant ever seen in a Dahlia. The immense flowers often attain a width of 10 to 12 inches, and the massive petals are twisted and curled in the most fantastic manner. Each, 50c.

P. W. Janssen

A magnificent Dahlia of splendid form and distinctive coloring, being a lovely shade of old rose, marked and suffused with deep, rich golden yellow, a rare and beautiful combination. Extra fine.

Each 35c postpaid.

Queen Wilhelmina

Large, pure white, central petals beautifully twisted and curled; very vigorous and free flowering; one of the finest garden Dahlias:

Plants or tubers. Each, 35c.

Glory of Groenekan

Extra large flowers of finest form. Color a splendid golden orange. Strong grower; free-flowering.

Plants or tubers. Each, 35c.

ANDREW CARNegie—Salmon pink, shaded bronze, extra large

Each, 35c.

8 Magnificent Show Dahlias

Finest of their Class--

Special, postpaid, \$1.50.

MRS. ROOSEVELT—A beautiful, delicate pink, of immense size, fine stems, perfect form, large and double, superb.

Each, 35c

A. D. LIVONI—This grand old variety still remains the best pink of its type.

Each, 15c

DREER'S WHITE—A magnificent white, of great purity, long stems.

Each, 35c

GRAND DUKE ALEXIS—Finest large white. Nothing surpassing this magnificent Dahlia has ever been produced.

Each, 35c

LUCY FAWCETT—Sulphur-yellow, flaked crimson.

Each, 15c

FRANK SMITH—Very dark rich red with light tips, variable; a fine full flower, good grower.

Price, each, 25c.

THOS. PENDRED—Finest and largest of the pure yellows, a rich soft shade of golden yellow, perfect form, blooms freely and continuously, even in dryest weather.

Each, 25c

DIADEM—Brilliant rich crimson, of fine full form, free blooming, has good stems.

Each, 25c.

Pom-Pon Dahlias

These are pretty little globe shaped flowers, on long stems, high above the dwarf foliage, fine for border, keep well when cut.

CATHERINE—Purest yellow; large. Each, 20c

DARKEST OF ALL—Darkest pom-pom; perfect flowers.

Each, 20c

NERISSA—Soft pink, silvery tint; a beautiful new color.

Each, 20c

VIVID—Brilliant scarlet.

Each, 20c

BESSIE—Creamy white, finely quilled. Each, 20c

WHITE ASTER—Fine pure white, fringed. 20c

New "MIGNON" Dahlias

A New Dwarf Type of Single flowered Dahlias growing to a height of about 14 inches. Plants are bushy and symmetrical and produce in the greatest profuseness on brilliant large flowers of fine substance, borne on long stiff stems high above the foliage. They make a grand garden display and are long keepers when cut. Mignon Dahlias originated in Holland and were awarded 5 first-class certificates and 5 awards of merit at Amsterdam. We offer in four colors, **Brilliant Orange**, **Velvety Crimson**, **Yellow and Violet**.

Price, each, 20c; doz., \$2.00.



"Geisha"
New
Paeony
Flowered
Dahlia

Paeonies



PAEONY MOUTAN

Japanese
Tree
Paeony

THE development and increase in popularity of the Paeony has been unparalleled among flowers, and the profusion and duration of bloom, combined with handsome, massive foliage, accommodating habit, and easy culture, render them one of the most popular, hardy plants grown for lawn and garden decoration.

Paeonies are always free from disease and insects do not bother them. They are hardy, thrifty growers, bloom freely, and nothing will add more to the beauty and attractiveness of a lawn.

Paeony Moutan (Tree Paeony.)

Grows about four feet high forming a small, tree-shaped shrub. When this plant becomes well established and is covered with dozens of massive blooms, it presents a magnificent display. We have Crimson, Pink, Scarlet, Rose and Variegated.

STRONG IMPORTED ROOTS, from January to May, by express at buyers' expense (too heavy to mail). **Each, 75c**

Paeonies

Double Herbaceous

New—Baroness Schroeder

(KELWAY)—We offer true stock of this rare Paeony, the most beautiful and desirable of English introductions.

Color in bud is a lovely, delicate flesh pink, bleaching to white when fully expanded, extra large massive flowers; true stock is scarce and we can supply but a limited number of field grown roots, 2 to 3 shoots. **Price, each \$2.50**

FESTIVA MAXIMA—This superb variety is easily the most popular and valuable Paeony. Its flowers, of rare beauty and great size, are perfectly double, pure white, tipped or flaked with a small crimson spot at center; petals fine as summer silk; finest white in cultivation; strong roots. **Price, each, 75c**

Large specimen plants, \$2.00

OFFICINALIS RUBRA—Flowers of a bright scarlet crimson; quite double and globular; very early, rare and fine. **Price, 30c**

OFFICINALIS ALBA—Blooms with Officinalis Rubra: flowers large and handsome. When Alba first opens it is light pink, fading to white as flowers get older. **Price, 30c**

GOLDEN HARVEST—Nearest approach to yellow; shows some pink while in bud, but as soon as it opens, turns to a creamy yellow, with a few red tips; a fine free bloomer and a grand flower; mid-season. **Price, 60c**

MAD. DE VERNEVILLE—Broad outside petals, sulphur white, with center rosy white, sometimes edged carmine, and beautifully imbricated; an exceptionally fine full flower, with the sweet fragrance of the rose. One of the earliest. **Price, 50c**

OFFICINALIS ROSEA—Beautiful bright pink globular flowers, blooms with Officinalis Alba and Rubra. These splendid early bloomers produce fine flowers for Decoration Day. **Price, 30c**

SOUVENIR DE L'EXPOSITION—Large full flower of a lovely light cherry red. **Price, 60c**

COURONNE D'OR—A superb white flower of immense size, reflects yellow, center petals bordered carmine, a perfect flower of great beauty, very fragrant, free blooming and vigorous; late. **Price, 75c**

DELACHEI—Large full flower of a deep crimson, purplish tone; a free blooming thrifty grower, very fragrant; medium to late. **Price, 35c**

FLORAL TREASURE

Lovely salmon pink tint greenish heart, large full flower, light green foliage; a free bloomer and a fine cut flower. **Price, 60c**

SOUVENIR DE L'EXPOSITION

Large full flower of a lovely light cherry red. **Price, 60c.**

MAGNIFICA—Truly a magnificent paeony; color a beautiful rich pink; a thrifty, free blooming and desirable kind. **Price, 40c**

QUEENS PERFECTION

One of the finest of the creamy flesh whites, large, full and attractive. **Price, 75c**

Eremurus

HIMALAICUS

A rare and noble bulbous plant from the Himalayan Mountains, grows 4 to 8 feet high, bearing racemes 2 feet long, of lovely pure white flowers as large as a half dollar. Plant about 8 inches deep and protect the young shoots which start early, a few inches of leaves or some light mulching will keep frost from injuring the tips. **Price, strong flowering roots, \$1.00 each; doz., \$9.00**



Our Japanese Paeonies, Palms, Iris and Ornamental Plants arrived in splendid condition and are the best values we have ever offered. See Autumn Catalog for complete list.

BEGONIAS—Tuberous Rooted

FROM their early first blooming until cut down by frost, Tuberous Begonias display a mass of bloom of most gorgeous and brilliant coloring. They are distinct and unique, their giant flowers fully six inches in diameter, in wonderful shades of yellow bronze, white, reds, pinks, etc., with thick waxy petals and grand ornamental foliage, never failing to excite the wonder and admiration of all who see them. There are four types, Single, Double, Frilled and Crested.

CULTURE—The soil should be rich in leaf mould, or well-rotted manure, a little sand being beneficial. Start the bulbs inside in the early Spring, and transplant when danger of frost is past. They should be lifted in the fall before frost, dried and stored in sand in a cool place.

Single Flowering

These are of immense size, erect, flowers of great substance, free blooming and very lasting. Come in eight separate colors, copper, canary, orange, crimson, rose, pink, white and salmon.

Price, each, 10c; doz., 85c; 100, \$6.00

Crested

This remarkable strain comes in all the finest colors, and the flowers are as large as the largest singles. The petals, of great substance, carrying on their upper surface a crested formed cockscomb, which is a very attractive and interesting addition to the flower. Price, separate colors,

Each, 20c; doz., \$2.00; 100, \$15.00

Double Flowering

Many charming effects are found in the double varieties, they being often as full and beautiful as a rose, some of the white varieties resembling giant carnations. Price, separate colors.

Each, 15c; doz., \$1.50; 100, \$10.00

A good way to start Begonias and Gloxinias is to put the bulbs on a layer of moss in a box or flat and cover with another layer. Keep moist, but not too wet; temperature about 70 degrees; this starts both top and roots, then pot for root development before transplanting outside.



Our Begonias and Gloxinias come from Ghent, Belgium, where the finest bulbs are grown.

Frilled

Single frilled Begonias differ from the plain singles only in having the heavy frill or fringe on the edges of the petals. They have the same range of color, handsome foliage and free flowering habit. Separate colors.

Each, 20c; doz., \$2.00; 100, \$15.00

Mixed

OUR DIAMOND MIXTURE, containing all of above sorts. Per doz., \$1.50; 100, \$10.00

WE are extensive growers of Cannas, and the following sorts are newer and better types that will give best results in our climate. Cannas require a rich, moist soil and should not be planted until all danger of frost is past. They are quick growers and the new flowering sorts bloom continuously until frost. Inexpensive, these charming, ornamental plants produce rich tropical effects that cannot be excelled, and the grand new varieties offered are equally valuable for the beauty of their bloom. Let us know your requirements. We can supply the correct variety.

Prices: Except where noted, bulbs or plants. In season, each, 20c; dozen, \$2.00, postpaid.

ALICE ROOSEVELT—Deep crimson, compact green foliage; similar and superior to Alphonse Bouvier. Height 4 to 5 feet.

ALLEMANIA—Light green, compact foliage, orchid type of flowers, bright golden lemon center marked and spotted terra cotta; height 4 to 5 feet.

BUCHARLAT AINE—Deep scarlet, very large flower and spike.

CARL LUTZ—New. A splendid bright rich yellow of finest form; foliage, leathery and luxuriant, a fine upright grower and profuse bloomer. Height, 3 $\frac{1}{2}$ feet.

JEAN TISSOT—Brilliant vermillion; green foliage; fine; 3 to 4 feet.

KING HUMBERT—In this grand new orchid-flowered Italian Canna we have a combination of the highest type of flower with the finest bronze foliage. Its mammoth flowers, in heavy trusses, are a brilliant orange-scarlet, with bright red markings, foliage is broad and massive and of a rich coppery bronze with brownish green markings; bold and effective; has no equal; 5 to 6 feet.

LOUISIANA—A strong, vigorous grower, producing a dense mass of glossy green foliage and vivid orange-scarlet flowers of mammoth size; Orchid type; height 4 to 5 feet.

ROSEA GIGANTEA—Finest of the new pinks, the rich, deep rose-colored flowers often measuring five inches across are borne in the greatest profusion, nothing finer has ever been offered; foliage green; 4 to 5 feet.

MILLE. CHARLOTTE MONGEOT—New. A free bloomer bearing mammoth spikes of large bright cerise pink flower; foliage, green; a vigorous, compact grower; one of the most satisfactory and attractive of the new cannas. Height, 3 $\frac{1}{2}$ feet.

PRESIDENT MEYER—Large, rich, bright scarlet flowers; dark bronze foliage, 3 to 3 $\frac{1}{2}$ feet; extra good.

WYOMING—A grand orchid-flowering Canna, with deep bronze foliage and immense golden orange flowers, suffused with a blush of crimson; height 4 to 5 feet.

Price, each, 25c; doz., \$2.50

RICHARD WALLACE—Light canary yellow flowers of extra large size and good substance, free blooming, vigorous; green foliage; one of the best of the grand new flowering cannas; 4 feet.

WM. SAUNDERS—Deep fiery crimson, flowers borne freely on large spikes; foliage, bronze green; compact; vigorous grower. Height 3 to 4 feet.

"Diamond Quality" ROSES

WE offer only the best of the standard varieties and the newer sorts that have been tested in field trials. You will find them true to name and as represented. We number among our customers the most successful rosarians in the Northwest, and if you entrust your rose order to us you can feel assured that there will be careful selection and no substitution. If you do not find what you want in this catalog, write us. We can supply many varieties not listed.

Abbreviations

T.—**TEA**—One of the best classes of roses, and truly ever blooming. They are hardy in this section, frequently wintering without any protection, although during our coolest weather and in cold sections they should be protected with a covering of fir boughs, straw or burlap.

H. P.—**HYBRID PERPETUAL**—The hardiest of all roses, vigorous in growth and easy of culture, producing large flowers, fine in form and fragrance.

H. T.—**HYBRID TEA**—Most of these are as free flowering and as constant bloomers as the teas, and are hardier, but, as a rule, not so hardy as the H. P.'s.

PLANTING AND CARE

In our favored section Roses attain a perfection seldom equalled, but you can not expect them to thrive and bloom unless you care for them.

We offer the following simple suggestions.

SOIL.—Any good, well-drained garden soil enriched with fertilizer will give excellent results. If heavy clay soil mulch well with burnt earth and manure, rotted sod or leaf mold.

FERTILIZER.—Our odorless commercial fertilizer, Bone Meal, Tankage or Blood will give excellent results, and should always be applied after the plants starts its growth.

WATERING.—When setting out, water regularly until roots are well set; then about once a week unless the ground is very dry; in such cases more often. Do not get the foliage wet after a hot day. This causes mildew.

FINALLY.—Keep the surface well worked around the roots. This is as necessary as water or fertilizer.

When planting cut back freely, and the bush will recover quickly.

SHIPPING.—We always send all our two-year-old rose bushes charges collect by express or freight, packing them so they will keep safely, even though they should be on the road for two weeks or more.

If necessary, we can send small two-year-old bushes by mail at an additional cost of 7c each to cover postage, but in such cases we always prune the tops and roots ready for planting.

 FOR ALPHABETICAL, CLASSIFIED LIST OF ROSES, SEE PAGE 89.

New Gold Medal Roses for 1913

Six magnificent new roses imported direct from famous Irish and Continental growers.

Special Offer: One each of the following six sorts, \$7.50

Prices quoted are for field grown two-year-old plants. No one-year-old plants in this collection.



JULIET

JULIET—H. B.—A magnificent new rose, the color being a wonderful combination of old gold on the outside of petals and a rich rosy red on the inside. Flowers are large, full and delightfully scented. The foliage is luxuriant and beautiful. Juliet is a vigorous and abundant grower, and the most pleasing and distinctive novelty ever offered. We have an extra choice, though limited stock of large, field grown, two-year-old plants.

Each, \$1.50

SUNBURST—H. T.—The finest of all yellow roses with long pointed buds carried singly on good stems. Flowers large, full and of most beautiful form, color a superb Cadmium yellow with orange yellow center. The foliage is a handsome bronze green; a vigorous grower and good both as a forcing or garden rose.

Each, \$1.50

EDWARD MAWLEY—H. T.—Flowers large and full, of finest form, with beautiful, long pointed buds, color deep rich velvety crimson which does not fade, flowers keep well when cut; growth is vigorous, upright and branching, with handsome foliage. Edward Mawley is one of the finest red roses ever offered, being a decided advancement in its class. Two-year-old field-grown plants.

Each, \$2.00

SIX NEW ROSES—Continued



COUNTESS OF SHAFTESBURY—H. T.—A splendid new pink of the most ideal type of Hybrid Tea; flowers are large, perfect in form and produced in the greatest profusion. The color is a bright, silvery carmine mottled and flushed shell pink, giving a picotee effect; a fine exhibition rose, being a Gold Medal winner and the best pink rose, for massing or garden. **Each, \$1.50**

RAYON D'OR—Pern. Flowers are large, full, open freely, keep well and are borne in greatest profusion. Buds long pointed of deep orange cadmium smeared claret, opening to a rich sunflower yellow which does not fade. Foliage is deep glossy green, strong growing, free branching and absolutely free from the attack of mildew. This splendid new Rose, a cross between Melaine Soupert and Soliel D'Or is producing a greater sensation than was caused by Lyon, both these wonderful varieties originating from the same source. **Each, \$1.25.**

MRS. CHAS. E. ALLAN—H. T.—A delightful garden rose of a delicate and novel coloring, opening a pale orange and changing to ochre as the flower opens. Buds are long, pointed, and flowers are full on good stems, flowers freely, every shoot producing a bloom; a vigorous grower and one of the finest garden roses ever introduced. **Each, \$1.50**

"BOOK of the ROSE" *By Rev. Foster-Melliar*
The most recent, complete, authoritative work, written by a master rosarian.
356 pages - \$2.00 - Postpaid, \$2.15

Seven Splendid Novelties from Europe

Price: One-year-old plants, 25c each; set of 7 sorts, \$1.50. Two-year-old plants, 75c each; (except as stated); set of 7 sorts, \$5.00.

COMMANDER JULES GRAVERAUX—H. T. Fiery crimson, lightly shaded velvety maroon, purple in the center, a seedling of "Druschnki," which it is said to greatly resemble in habit, growth and foliage. Buds are long and spiral. Come singly, and upright on the stems; vigorous erect and free blooming.

ETHEL MALCOLM—H. T.—Ivory white becoming pure white as flower opens, with pale pink shading in center; very large, free bloomer; vigorous. Two year old plants. **Each, \$1.00.**

JONKEE J. L. MOCK. (H. T.)—A magnificent and unique Rose. Inside of petals red, outside silvery blush white. Of fine form, good substance and largest size. A strong, rapid grower. This rose has been awarded eight prizes at the recent European shows.

VISCOUNTESS ENFIELD—H. T. A fine, large, elongated bud, opening to a full flower of cup form; color, coppery old rose shaded yellow, deep carmine center, sometimes splashed yellow. Foliage rich green, tinged brown. Vigorous, erect, branching habit; free and continual bloomer.

LADY ALICE STANLEY. (H. T.)—This grand new gold medal rose is large, very full and of splendid substance; petals shell shaped, pointed, giving perfect form to the flowers, which are a lovely deep coral, inside pale flesh, deliciously fragrant and are very lasting. A free grower and a profuse and constant bloomer. Two year old plants. **Each, \$1.00.**

LADY HILLINGDON—T. Deep apricot yellow, long and pointed bud, a fine forcing or garden rose, excellent for cutting. Flowers are of good substance, very lasting and foliage handsome and luxuriant. Lady Hillington is considered the best decorative rose in its class. This aristocratic beauty is a seedling from Papa Gontier and Madame Hoste. Two year old plants. **Each, \$1.00.**

MRS. AARON WARD. (T.)—One of the most delightful roses of recent years in a color that catches the eye at once—a deep golden orange color shading out to lemon or creamy yellow at the edge of the petals. Some describe the Rose as an Indian yellow. The buds are cupped and very deep, showing the glowing heart to the best advantage. Flowers very large, very full, of exquisitely refined form. One of the most beautiful Roses in existence.

3 New Single Irish Roses

SPECIAL—One each of three varieties, two-year old plants only, \$1.50.

IRISH SIMPLICITY—Almost single, pure white and of immense size. The great size and substance of the petals which are slightly cupped and the golden yellow anthers may readily bring to mind the comparison to a huge water lily. Vigorous grower with handsome deep green foliage. **Price, 75c.**

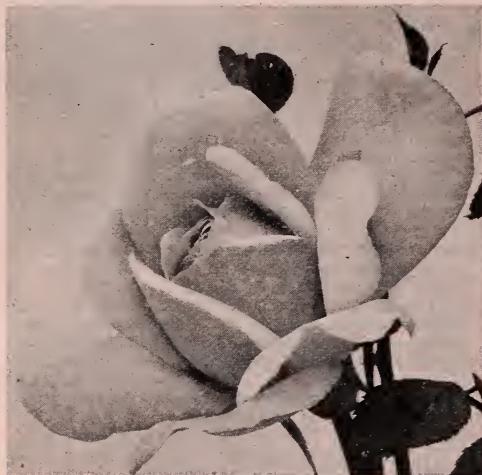
IRISH ELEGANCE—Large single golden bronze flowers of great beauty, free and constant bloomer, with deep bronze foliage, making a most handsome and unique combination that for garden decoration cannot be excelled. Awarded gold medal N. R. S. **Each, 50c.**

IRISH HARMONY—Single, saffron yellow, heavily crayoned claret in bud, when expanded changes to creamy white; large, lasting floriferous; a vigorous grower, and good companion for Irish Elegance. **Each, 50c.**

**PORLAND SEED COMPANY'S
ROSE CITY COLLECTION
16 Superb Garden Roses**

**PRICE except where noted: Large, 2-year-old plants, \$7.00
50c each. The entire collection, 6 distinct varieties, only \$7.00**

NOTE These splendid free blooming Roses are newer varieties that are becoming more plentiful and can be offered at a very low price. In this list you will find many famous prize winners and some of the most beautiful and popular roses. **No one-year-old plants of these sorts this season.**



Marquise De Sinety

DUCHESS OF PORTLAND (H. T.)—One of the best Dickson introductions; a lovely pale yellow with thick leathery petals, full and perfect form; hardy, robust rose blooming earlier and more freely than "Kaisserin;" long stems; lovely in bud or flower, and a good keeper. Gold medal N. R. S.
Price 60c.

ELIZABETH BARNES—H. T. Satiny salmon Rose with fawn center, suffused yellow, outside of petals rosy red, tinted copper and yellow; flowers large, full and freely produced.

EDU MEYER, H. T.—Rich coppery yellow shaded orange and red, buds long and pointed. Flowers full, of fine form and are born freely.

GLOIRE DE CHIDANE GUINOISSEAU. (H. P.)—Brilliant vermilion red; large and full; finely formed; a grand rose.

HARRY KIRK—H. T. Deep sulphur yellow, paler towards edges of petals, long pointed bud, moderately full; a fine garden rose.

LE PROGRESS—H. T. Nankeen yellow, opening to saffron yellow; large, full and cupped, opening freely; a grand rose always in flower.

HON. INA BINGHAM (H. T.)—Beautiful shade of bright pink, distinct in form and color, of good substance, highly perfumed; a hardy robust garden rose.
Each, 40c.

JOSEPH HILL, H. T.—Salmon Pink shaded yellow. Outside petals yellow suffused copper, a grand free blooming rose of large size and most elegant form.
Each, 60c.

LADY ASHTOWN (H. T.)—One of the finest pinks of a rich, deep, silvery tone; flowers large, perfect form; free blooming; vigorous; Lady Ashtown is one of the finest blooming roses grown.
Each, 35c.

LADY ROBERTS (T.)—Rich apricot, base of petals coppery red, edges of petals shaded orange, bud long and pointed very beautiful. Gold medal N. R. S. Be sure to order Lady Roberts.

LYON (*Pernetiana*)—The Lyon is a beautiful shrimp pink with salmon and chrome yellow shadings. Large coral red buds beautifully formed; full globular flowers of rare beauty; a continuous and free bloomer. Lyon is the "perfect rose," only one scoring 100 points. Gold medal and special certificate awards.

MARQUISE DE SINETY H. T.—Golden orange shading to fiery red, large double flowers, of good form, very beautiful and attractive. A splendid garden rose for summer blooming; vigorous and hardy. One of the grandest of the new roses.

MILDRED GRANT (H. P.)—Delicate pale pink, shading to silvery white in center; grand giant variety of rare beauty; perfectly formed, pointed buds; full flowers of fine substance; a hardy, strong grower.
Each, 35c.

MRS. ARTHUR WADDELL. (H. T.)—A strong rampant growing Hybrid Tea Rose, with foliage that is ornamental in itself. Large, long pointed buds of a bright rosy scarlet opening into a finely formed flower of a rich apricot or salmon color.

MRS. E. G. HILL, H. T.—Outside of petals lovely shade of deep coral, inside delicate blush white. Large, full and free blooming, a splendid rose for gardens or cut flowers.

SOLEIL D'OR (Pern.)—(**Golden Sun**)—The first of a new type and from which the wonderful Lyon Rose was developed. A perpetual bloomer, robust grower, brownish wood, foliage beautiful, bright green and scented. Flowers very double, most beautiful when full blown, a superb color, varying from gold and orange yellow to reddish gold and shaded with nasturtium red. Delightfully fragrant.
Each, 40c.

8 Grand New Garden Roses

Price: One-year-old plants, 20c each; set of 8 sorts, \$1.25. Two-year-old plants, 50c each set of 8 sorts, \$3.25.

DOROTHY PAGE ROBERTS—H. T. Coppery pink, suffused with apricot yellow, very free and perpetual, a delightful garden rose.

MADAME MELAINE SOUPERT—H. T.—Splendid new orange yellow shaded pink; beautiful long-pointed buds, large size, free blooming; a strong, upright grower; best of its color.

MY MARYLAND (H. T.)—Beautiful bright pink, with paler edges; delightfully fragrant; robust grower and very free flowering; flowers full and good keeper. This is the most popular rose novelty of the day, and best pink of its color; specially fine for florists, as well as being one of the grandest garden roses.

PHARISAER, H. T.—Rose, shaded salmon, blooms freely, opens well, is large and of finest form. A free and constant bloomer.

PRINCESS MARIE MERTCHERSKY. (H. T.)—Flowers flesh flushed with carmine; large and full; very beautiful.

RHEA REID H. T.—A new American rose which can best be described as being as red as a "Richmond," as large as an "American Beauty," with the fragrance of "La France," and blooms continuously, flowers being borne on long stems; very hardy and vigorous.

WM. SHEAN (H. T.)—Pure bright pink, veined with ochre, large perfect form, pointed bud, of fine substance and a grand exhibition rose. Gold medal N. R. S.

WHITE KILLARNEY. (H. T.)—The finest ever-blooming white rose for cut flowers. The long pointed buds are of ideal form, petals pure white and heavy wax-like texture, remaining a long time in bud. Flowers are full and beautiful when open and are very lasting.

Betty Collection Everblooming Roses

Price: One-year-old plants, 15c each; set of 8 sorts, \$1.00. Two-year-old plants, 40c each. set of 8 sorts, \$2.65.

AVOCA—(H. T.) Deep, scarlet, crimson flowers of perfect form; very fragrant; a fine exhibition or garden rose; vigorous, free bloomer.

BETTY—Beautiful coppery rose color, over spread with golden yellow. Deliciously fragrant, very large, fairly full and of glorious form. Superb decorative variety for the garden, fairly glows with brilliancy. One of the freest blooming roses we know of.

DEAN HOLE—Beautiful silvery carmine, shaded bright golden pink; grand flowers of great substance, perfect in form; vigorous, free branching habit; continuous bloomer; one of the best exhibition roses. Gold medal N. R. S.

MADAME PHILLIPPE RIVOIRE (H. T.)—Beautiful apricot yellow and Nankeen yellow center, reverse of petals carmine; large, full and globular, a splendid free blooming rose.

Hardy Collection, Hybrid Perpetual Roses

Price: One-year-old plants, 15c each; set of 12 sorts, \$1.25, postpaid. Two-year-old bushes 35c each; set of 12 sorts, \$3.00.

ANNA DE DIESBACH—Brilliant pink, shaded silvery white; long-pointed buds and large, finely formed flowers; extra fine.

BARON DE BONSTETTIN—Splendid large flowers, very double and full; color, rich dark red, passing to deep velvety maroon.

CLIO—Vigorous growth; large, handsome foliage; flowers flesh color, shaded in the center with rosy pink, very large, fine globular form, and freely produced. A grand addition in the style of Baroness.

CAPTAIN HAYWARD—Color, deep glowing red, flushed with crimson. A free bloomer; deliciously perfumed; large and handsome.

GENERAL JACQUEMINOT—Bright, shining crimson; very rich and velvety.

GLOIRE LYONNAISE—Color, chamois yellow, deepest at the center, passing to creamy white; large, full, sweet and very distinct.

Favorite Collection of Beautiful Roses

Price: One-year-old plants, 10c each; set of 14 sorts, \$1.25. Two-year-old bushes, 35c each; set of 14 sorts, \$3.50.

BRIDESMAID—Beautiful pink buds opening into finely formed flower. One of the most popular tea roses.

CECILE BRUNNER—Bright rose, yellowish in center; very sweet; dwarf polyanthus.

CLARA WATSON—H. T.—A bright salmon rose tinted peach, good form; a vigorous grower.

GRUS AN TEPLITZ or VIRGINIA R. COXE—Color, fiery crimson, with a dark velvety sheen, very fragrant. The freest blooming rose.

LA FRANCE—Both flowers and buds are of grand size; color, a silvery rose, changing to pink. A general favorite and the sweetest of all roses.

MARIE VAN HOUTTE—Of a fine, faultless straw-yellow color; outer petals washed and outlined with a bright, rosy carmine.

MRS. B. R. CANT—The flowers are of a beautiful deep rose color on the outer petals, while the inner petals are soft silvery-rose, suffused with buff at the base.

FOUR PORTLAND FAVORITES

Large Two-year-old plants' 35c each; \$3.00 per doz.

ANNA OLIVIER. (T.)—A splendid ever bloomer; very beautiful in bud; flesh color shading to blush. Large and fragrant.

ETOILE DE LYON. (T.)—Blooms freely, and every flower is a gem, equaling the Marechal Neil in size. Very sweet scented; color rich golden yellow.

GENERAL MCARTHUR—Dazzling crimson scarlet, a grand American rose of ideal form, delicious perfume and magnificent foliage. Blooms continuously in great profusion, the grandest red rose for garden or cutting.

MAD. SEGOND WEBBER—H. T. Pure, rosy salmon, vivid center, large, full and perfectly formed flower, flowering freely and continuously on stiff erect stems.

MRS. DAVID JARDINE—H. T. Delightful shade of bright rosy pink, shading in outer petals to salmon pink, large, perfect form, very highly perfumed: a grand rose.

W. R. SMITH (T) (Maidenblush)—A superb new rose of American origin, producing elegantly shaped buds and open flowers of much beauty. Of an exquisite silvery pink color and sweetly perfumed.

MARGARET DICKSON—Magnificent form; white, with pale flesh center; petals very large, shell-shaped, and of great substance; fragrant.

MRS. JOHN LAING—Very free flowering; color, a soft, delicate pink, with satiny tinge. **MRS. R. G. SHARMAN CRAWFORD** (H. P.)—Lovely deep rose pink, outer petals shaded pale flesh, base white, a new and unique shade. Large perfect flowers, free blooming; a grand autumn rose.

PAUL NEYRON—Deep, shining rose, double and handsomely formed; blooms freely, the largest variety in existence.

PRINCE CAMILLE DE ROHAN—Very dark, rich velvety crimson, passing to intense maroon, shaded black; regarded as the best of its color.

ULRICH BRUNNER—A magnificent rose, extra large, bold flowers, full and globular; petals large and of good substance; color, rich, glowing crimson, elegantly flamed with scarlet.

PAPA GONTIER—Large and semi-double; a vivid cherry red color, shaded yellow, reverse of petals crimson.

PERLE DES JARDINS—A clear, golden yellow, an indescribably rich and beautiful shade, and entirely distinct.

RAINBOW—Buds and flowers of large size; color, a beautiful shade of deep pink, distinctly striped and mottled with brilliant crimson, elegantly shaded and toned with rich amber; very fragrant.

SAFRANO—Bright apricot yellow, tinged, orange and fawn.

THE BRIDE—One of the finest and most popular pure white tea roses.

VISCOUNTESS FOLKSTONE—Flowers borne on strong stems, with thick foliage; color, delicately tinted flesh, almost white, with beautiful satin finish.

WHITE LA FRANCE—This magnificent rose is a pure white La France, having just a breath of rose-tinted blush.

BARONESS ROTHSCHILD. (H. P.)—Flowers of immense size; color bright, rosy pink. **PRINCE OF BULGARIA**—Very vigorous grower with large, bright green foliage, beautiful form of bud, flower very large and full. The outer petals are extremely large, of superb rosy flesh color, center of flower bright red, very fine and very free.

Columbia Collection Choice Roses

Price: One-year-old plants, 15c each; set of 12 sorts, \$1.25. Two-year-old plants, 35c each; set of 12 sorts, \$3.50.



Lady Battersea

AMERICAN BEAUTY—One of the largest, sweetest and best. Color, rich, rosy crimson, shaded and veined in the most charming manner.

BELLE SIEBRECHT—A true, solid pink of the richest shade, a rare color. The flowers are sweetly perfumed, and large, beautifully formed, of long, tapering shape, with high center, and when half blown the petals reflex in a graceful manner.

BESSIE BROWN—Color, pure white sometimes faintly flushed pink.

12 Grand Free-blooming Garden Roses

Price, 15c each; set of 12 sorts, \$1.50. Two-year-old plants, 40c each except where noted; set of 12 sorts, \$3.50.

COUNTESS OF GOSFORD (H. T.)—Clear salmon pink, base of petals shading to saffron yellow, very vigorous; perpetual bloomer; a grand bedding variety.

FLORENCE PEMBERTON H. T.—Creamy white, suffused pink. Flowers very large and full of perfect form and wonderful substance. With out doubt one of the finest roses it has yet been our pleasure to offer.

FRANZ DEEGAN—This beautiful yellow Hybrid Tea is a fine grower, having dark leathery foliage and the good habit of throwing up numerous heavy canes, each one crowned by a glorious flower of large size.

KILLARNEY—The new Irish Beauty. Color, an exquisite shade of deep shell-pink lightened with silvery pink. Buds are exceptionally long and beautifully formed, the open flower is graceful in the extreme. It has a delicate Tea Rose fragrance.

LA DETROIT—A beautiful shell-pink shading in the center to a soft rose pink. Reverse of outer petals creamy-flesh tint, strong, healthy grower; prolific bloomer; delightful tea fragrance. **Ea., 35c.**

LADY BATTERSEA (H. T.)—This variety has long oval buds, sharply pointed, very striking in form. The color is a bright, cherry crimson; an unusually showy variety. **Each, 35c.**

FREIHERR VON MARSCHALL—From what we have observed of this variety during the past two years we have had it on trial, it will fill a long felt want. Color dark carmine with long pointed buds, the open bloom of large globular form and great substance. **Each, 50c.**

MADAME CAROLINE TESTOUT—A grand rose of the La France type, but with flowers larger and finer. Color, bright satiny pink; very fragrant and free in bloom. The official "Carnival Rose."

KAISERIN AUG. VICTORIA—A beautiful rose with elegant, large pointed buds and very large, full double flowers; color, delicate creamy white; deliciously fragrant. A strong, healthy grower and constant bloomer.

MAD. ABEL CHATENAY—Color, beautiful rosy carmine, with darker shadings. Very richly colored. One of our finest varieties, which should find a place in every rose garden.

MAMAN COCHET—This is one of the most beautiful new Tea roses we list. The color is a deep, rosy pink, the inner side of the petals silvery rose.

RICHMOND—The most vivid of ever-blooming red roses, buds and flowers of the most perfect and desirable form. The best of its color.

SOUV. DE PIERRE NOTTING—Very large, perfectly full, of elegant form; has a beautiful long bud; color, orange yellow, bordered in carmine rose. Stands in the very front rank as a producer of fine yellow roses.

SOUV. DE PRESIDENT CARNOT—Lovely shell-pink, delicately tinted with golden fawn on rich creamy white. Superb for bedding in open ground. Makes splendid buds for summer cutting.

WHITE MAMAN COCHET—White, grand substance, immense size, exquisitely fragrant, and a free bloomer; buds long and pointed, keeping a long time when cut.

MADAME JULES GROLEZ—A rampant grower, with very large full flowers of a magnificent satin rose color extra fine.

MME. LEON PAIN—H. T.—A silvery flesh with yellowish orange center; very large and full; opens freely; vigorous.

CONRAD F. MEYER—Beautiful silvery pink, of grand form and delicious fragrance, hardy in any climate, and the great beauty of its handsome foliage makes it most valuable for a flowering hedge. **Each, 35c.**

FRAU KARL DRUSCHKI—The White American Beauty. Makes splendid buds and immense flowers; perfectly double and delightfully fragrant; large, thick petals; bright, shining green leaves, elegantly veined; a healthy, vigorous grower; and a constant and abundant bloomer. **Each, 35c.**

HUGH DICKSON—Glowing crimson, shaded scarlet; large, full, perfectly formed, delightful perfume, strong grower, perpetual bloomer (should be cut back freely.) After careful comparative tests, we believe Hugh Dickson is the best hardy red garden rose to date.

J. B. CLARK—H. T.—One of the finest of new roses. Its glorious flowers are intense scarlet, shaded blackish crimson, of giant size, finely formed and fragrant; growth vigorous and upright.



SEE PAGE 89 for Alphabetical Classified LIST OF ROSES.

Dwarf Polyanthus or "Baby" Roses

Price, 15c each; set of 8 sorts, \$1.00. Two-year-old plants, 35c each; set of 8 sorts, \$2.50.

BABY RAMBLER—A dwarf Crimson Rambler not over 18 inches high, producing large trusses of light crimson flowers; clean dark green foliage; it will flower the year around.

CATHERINE ZEIMET—Covered all summer long with a profusion of pure white flowers. A fine variety for bordering large rose beds.

JESSIE—A brilliant, glowing crimson that does not fade, a vigorous, erect grower, flowers in greatest profusion. The best red polyanthus.

MRS. W. CUTBUSH—A beautiful, bright pink, free blooming and vigorous. best of its color.

MRS. TAFT—Rosy crimson, one of the most beautiful and satisfactory roses in this class.

MAMAN LEVAVASSEUR (Baby Dorothy)—Vivid Carmine, free flowering, vigorous; a splendid bedding rose.

ORLEANS ROSE—Bright rosy red with peach center, a vigorous grower, producing immense trusses of bloom.

PHYLLIS—Bright carmine pink; erect, vigorous and free blooming. One of the finest in this class.

CLIMBING AND PILLAR ROSES

Price, 15c each; any 4 sorts, 50c. Two-year-old bushes, 35c each (except as noted).

AARDS PILLAR—Rich velvety, crimson; fine large full flower, cupped form; a hardy, free-blooming, free-growing garden rose, of finest quality. Two year old plants only. **Each, 50c.**

CLIMBING BELLE SIEBRECHT (C. H. T.)—Flowers identical with bush type; vigorous climber; hardy.

CLIMBING BRIDESMAID (T.)—Beautiful pink; profuse bloomer.

CLIMBING KAISERIN (Mrs. Robert Peary)—Flowers fine, ivory white, of heavy texture, and large size.

CLIMBING LA FRANCE—Identical with the well-known La France; vigorous climber.

CLIMBING METEOR—Rapid grower; rich, dark, velvety crimson flowers.

CLIMBING MADAME CAROLINE TESTOUT Covered during the whole season with immense globular flowers of the same beautiful shade of pink as seen in the bush sort.

CLIMBING PERLE DES JARDINS—Of vigorous climbing habit; flowers golden yellow, of immense size.

CLIMBING PAPA GONTIER (T.)—A "Native Sport" from the favorite bush Papa Gontier.

DUCHESSE DE AUERSTADT—Splendid climber of the Marechal Neil type, being a more vigorous and hardy rose. Color is a fine rich yellow, flowers are large, full and open freely.

GAINSBOROUGH—Graceful flower of dainty shell pink color and satiny finish. Hardy, ever-blooming and a free climber.

LA MARQUE—Flowers of good size, borne in large clusters; color, pure white.

GLOIRE DE DIJON—Noted for the great size of its flowers, its delicate tea scent, and its shades of color, being a blending of amber, carmine and cream. Two year old plants only.

MARECHAL NEIL—A magnificent deep golden yellow variety; so famous as to need no description; grown the world over for its immense yellow flowers; the finest rose of its color in existence.

Choice Plants, Each 50c.

PILLAR OF GOLD—Rich golden yellow suffused copper and pink. Flowers are full, of fine form and delightfully fragrant. They are borne freely in clusters of from 5 to 10.



TAUSANDSCHAUN—A lovely shade of soft pink, free blooming, a vigorous climber with splendid foliage.

ZEPHRINE DROUHIN (H. C.)—Flowers very large and double, of a beautiful bright rose; hardy, rapid climber; foliage luxuriant, without thorns; a free-blooming, desirable rose.

Two Grand New Climbers

DR. VAN FLEET—A new Hybrid Climber of great beauty, bearing freely. Large double blooms of a dainty flesh pink with rosy center, flowers of perfect form with reflex petals and are carried on long stems, making this a desirable variety for cutting. Foliage is luxuriant bronze green. A cross of Pres. Carnot and Wichuriana. Two year old plants only. **Each, 75c.**

SILVER MOON—A magnificent white climber, cross of Wichuriana and Cherokee, large, semi double blooms of good substance with golden stamens. Flowers are carried on long stems. Foliage is abundant, delightfully fragrant, of a bronze green color and is immune to mildew. Two year old plants only. **Each, 75c.**

Pillar Collection—Climbing Roses

Price: Postpaid, 10c each; set of 6 sorts, 50c. Two-year-old plants, 35c each.

BEAUTY OF GLAZENWOOD—Bronzed yellow or copper and fawn color. One of our grandest climbing roses. Very hardy and a free bloomer.

CLIMBING CECIL BRUNNER—Strong rampant climber, ever-blooming clusters of pretty pink flowers, especially beautiful in bud state. A gem among climbing roses.

REINE MARIE HENRIETTE—A strong, vigorous grower; flowers large, full, and of fine form; color, glowing crimson, elegantly shaded.

MADAME ALFRED CARRIERE—Extra large, full flowers, very double and sweet, and a most profuse and persistent bloomer; color, rich, creamy white, faintly tinged pale yellow and blush.

REVE D'OR (Climbing Safrano)—Color apricot yellow, with orange and fawn tints; petals of superb and delicate texture.

WILLIAM A. RICHARDSON—Color, rich coppery yellow, flushed with carmine; a very beautiful variety, having few equals.

Five Grand New Rambler Roses

Price: Young plants, 15c each; set of 5 sorts, 60c. Two-year-old plants, 40c each; set of 5 sorts, \$1.60.

The Rambler Roses are strong, vigorous climbers, growing ten to twelve feet high in one season. They bear immense clusters of beautiful, fragrant flowers.

AMERICAN PILLAR—A beautiful bright pink with yellow anthers. The splendid large single flowers are borne in great clusters; the most popular pillar rose.

FLOWER OF FAIRFIELD—Everblooming Crimson Rambler, brilliant crimson, base of petals white, flowering in great profusion perpetually throughout the season..

PINK CHEROKEE—A grand new climbing Rose of rare beauty and undoubted merit and entirely distinct from any other climbing Rose. The lovely single blossoms are 3 to 5 inches in diameter, saucer shaped and of a beautiful shade of light pink.

VEILCHENBLAU—(Blue Rambler)—This is the Blue Rambler which created such a furore in Europe. It is a seedling from Crimson Rambler with semi-double flowers produced in very large trusses. The flowers first open pink, but quickly change to a violet or steel blue. Totally distinct and a wonderful Rose for pillar and porch decoration,

Four Popular Ramblers

Price: 1 yr., 15c each. 4 sorts, 50c.

PHILADELPHIA RAMBLER—An improved type of the favorite Crimson Rambler; color, deeper, more brilliant and lasting; flowers perfectly double, borne in great profusion, much earlier than the old type; vigorous, luxuriant foliage, not susceptible to mildew.

YELLOW RAMBLER—Same type and growth as Crimson Rambler, except for color, which is a pure, bright yellow.

WHITE DOROTHY—As its name indicates, it is a sport from Dorothy Perkins, possessing all the fine qualities of that grand variety but having pure snow white flowers. This rose we believe will become a fixture in the list of climbing Roses.

DOROTHY PERKINS—Polyanthus type; color a beautiful bright shell pink, flowers large, very double; petals prettily crinkled; blooms in large clusters of 30 to 40; a splendid keeper.

WHITE RAMBLER—Flowers pure white, sometimes faintly tinged blush, flowers borne in immense clusters; very vigorous.

Standard, or Tree Roses

Price of all Tree or Standard Roses, \$1.00 to \$2.00 each, according to size of head. Tree roses are budded or grafted on hardy rose stocks about four feet high. They soon make good sized heads forming a small tree, especially desirable for planting as single specimens, in backgrounds or rows along walks or driveways.

Order any color or variety you wish and we will send it or give you as good a substitute as possible. We aim to have the following varieties in stock:

La France	Hugh Dickson
K. A. Victoria	Conrad F. Meyer
Mad. Caroline Testout	Countess of Gosford
Ulrich Brunner	Dorothy Perkins
Grus an Tepilitz	Glorie de Dijon
F. K. Druschki	Gen. McArthur
Baby Rambler	Marechal Nell
Richmond	Mad. Abel Chatenay
Baroness Rothschild	Mad. Gabriel Lulzet
Gen. Jack	Wm. Allen Richardson

Moss Roses

These old-fashioned Roses are coming into favor and we offer the following as best of their colors. Price, each, 35c; dozen, \$3.00.

BLANCHE MOREAU—Flowers pure white, large, sweetly perfumed; borne in clusters. Best white Moss Rose.

CHAPEAU DE NAPOLEON—Splendid rich red, best of its color.

CRESTED MOSS—Bright rose, light edging, well mossed.

SALET—Color, lovely satin rose; very full and of great beauty; one of the best.

No. 5 is the
Best Fertil-
izer for your
Lawn and
Roses.

"How to Grow
Roses"

By Rev. S. S. Sulliger
Free on Request
Ask for It



APHISCIDE The Best Summer Spray for ROSES Prices, Qts., 25c; Gal., 60c
READY FOR USE

Alphabetical List of Roses

Name and Class.	Price Pg	Name and Class.	Price Pg	Name and Class.	Price Pg
Aards Pillar, H. T.	\$0.50	87 Gen, Jacqueminot, H. P.	.35	85 Mrs. W. Cutbush, Poly.	.35
American Pillar, S.	.40	88 Gloire de Nainnaisse, H. T.	.35	85 Mrs. Chas. E. Allan, H.T.	1.50
American Beauty, H. P.	.35	86 Gloire de Chidane Guin-	.35	83 Mrs. David Jardine, H.T.	.40
Anna Olivier, T.	.35	oisseau, H. T.	.50	84 Mrs. B. R. Cant, T.	.35
Anna de Diesbach, H.P.	.35	85 Harry Kirk, H. T.	.50	84 Mrs. E. G. Hill, H. T.	.50
Avoca, H. T.	.40	85 Hon, Ina Bingham, H. T.	.40	84 Mrs. John Laing, H. P.	.35
Baby Rambler, Poly.	.35	85 Hugh Dickson, H. P.	.40	86 Mrs. R. G. Sharman	
Baroness Rothschild, H.P.	.35	85 Irish Elegance, S.	.50	83 Crawford, H. P.	.35
Belle Siebrecht, H. T.	.35	86 Irish Harmony, S.	.50	83 Mrs. Taft, Poly.	.35
Bessie Brown, H. T.	.35	86 Irish Simplicity, S.	.75	83 Moss Roses	.35
Betty, H. T.	.40	85 J. B. Clark, H. T.	.40	86 My Maryland, H. T.	.50
Bridesmaid, T.	.35	85 Joseph Hill, H. T.	.60	84 Orleans, Poly.	.35
Blue Rose, Poly.	.40	88 Jonkheer, J.L. Mock, H.T.	.75	83 Papa Gontier, T.	.35
Capt. Hayward, H. P.	.35	85 Juliet, H. B.	1.50	86 Paul Neyron, H. P.	.35
Catherine Zeimet, Poly.	.35	87 Killarney, H. T.	.40	86 Pharisaeer, H. T.	.50
Cecile Brunner, Poly.	.35	85 Jessie, Poly.	.35	86 Pink Cherokee, S.	.40
Clara Watson, H. T.	.35	85 K. A. Victoria, H. T.	.35	86 Phyllis, Poly.	.35
Clio, H. P.	.35	85 Lady Alice Stanley, H.T.	1.00	83 Prince de Bulgaria, H.T.	.35
Climbing Roses		87 Lady Hillingdon, T.	1.00	83 Prince C. de Rohan, H.P.	.35
Com. J. Gravereaux, H.T.	.75	83 Lady Ashtown, H. T.	.35	86 Princess Marie Mert-	
Conrad F. Meyer, Rug.	.35	86 Lady Battersea, H. T.	.35	chersky, H. T.	.50
Countess of Gosford, H.T.	.40	86 La Detroit, H. T.	.35	86 Perle des Jardines, T.	.35
Countess of Shaftesbury H. T.	1.50	86 La France, H. T.	.35	86 Rayon D'Or, Pern.	1.25
Dean Hole, H. T.	.40	84 Lady Progress, H. T.	.50	84 Rhea Reid, H. T.	.50
Dorothy Page Roberts H. T.	.50	84 Lyon, Per.	.50	84 Richmond, H. T.	.35
Dorothy Perkins, Poly.	.35	88 Mme. Phil Revoire, H.T.	.40	86 Rainbow, H. T.	.35
Duchess de Auerstadt,	.35	87 Marquise de Sinety, H.T.	.50	86 Ramblers	.88
Duchess of Portland, H. T.		85 Mme. Segond Webber, H. T.	.40	86 Soleil D'Or, Pern.	.40
Dwarf Roses, Poly.	.35	84 Mme. Abel Chatenay, H. T.	.35	86 Safrano, T.	.35
Edu Meyer, H. T.	.50	84 Mme. Leon Pain, H. T.	.40	86 Souv. de P. Notting, T.	.35
Edward Mawley, H. T.	2.00	82 Mme. Melaine Soupert, H. T.	.50	86 Souv. de Pres. Carnot, H. T.	
Elizabeth Barnes, H. T.	.50	84 Mme. C. Testout, H. T.	.35	86 Sunburst	.35
Ethel Malcolm, T. H.	1.00	83 Mme. Cochet, T.	.35	86 The Bride	.35
Etoile de Lyon, T.	.35	86 Mme. Jules Grolez, H.T.	.35	86 Tree Roses	.88
F. von Marschall, T.	.50	86 Maman Levevassieur,		86 Ulrich Brunner, H. P.	.35
Florence Pemberton, H.T.	.40	86 Poly. (Baby Dorothy)	.35	86 Viscountess Folkstone, H. T.	.35
Franz Deegan, H. T.	.40	86 Margaret Dickson, H. P.	.35	86 Viscountess Enfield, H.T.	.75
F. K. Druschki, H. P.	.35	86 Marie van Houtte, T.	.35	86 White Mama Cochet, T	.35
Flower of Fairfield, Poly.	.40	88 Mildred Grant, H. P.	.35	86 White Killarney, H. T.	.50
Gen. McArthur, H. T.	.40	85 Mrs. Aaron Ward, H. T.	.75	86 Wm. Shean, H. T.	.50
Grus an Teplitz, H. T.	.35	85 Mrs. A. R. Waddell, H.T.	.50	86 White Dorothy, Poly.	.40
				86 White La France, H. T.	.35
				86 Wm. R. Smith T.	.85
					.40

For Climbing Roses See Page 87.

Flower Pots

We are agents for the Garden City Red Clay Pots and buy in carload lots. The wholesale trade, florists and nurserymen are requested to send for special prices, stating quantity wanted. They are by far the finest pots offered on this coast.

FLOWER, FERN, AZALEA POTS OR BULB PANS ALL SAME PRICE.

Size	Each	Dozen	Each	Saucers
2 inch	\$0.02	\$0.20		
3 inch	.03	.30		
4 inch	.04	.40	\$0.03	
5 inch	.07	.70	.04	
6 inch	.10	.90	.05	
7 inch	.12	1.20	.07 1/2	
8 inch	.15	1.75	.10	
9 inch	.25	2.50	.15	
10 inch	.40		.20	
12 inch	.60		.35	
14 inch	1.50		1.00	
16 inch	2.25		1.25	

PAPER FLOWER POTS FOR FLORISTS

Low in Price, Moisture Proof Unbreakable
Light, Convenient.

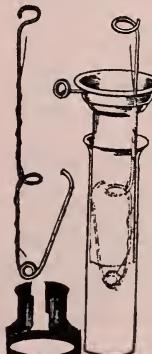
2 1/2 inch	100	1000
3 inch	\$0.60	\$5.50
3 1/2 inch	.80	7.00
4 inch	1.00	9.00
	1.25	11.00

HANGING BASKETS.

These are well made, having scalloped edge and fancy designs on the lower outside. Better than wire baskets, as plants do not dry out so quickly.

8-inch, each, 30c; doz., \$3.00. 10-inch, each, 40c; doz., \$4.25. 12-inch, each 60c; doz. \$6.50

NOTE.—At above prices we will pack the pots carefully, but buyer must pay freight or express charges. We buy in carload lots and the wholesale trade, florists and nurserymen are requested to send for special prices, stating quantity wanted.



Foster Rose Tubes

For Rosarians and Cut Flower Exhibitors

FOR SHOWING ROSES

The Foster Exhibition tubes with adjustable clips, enable you to transfer flowers from one position to another without disturbing their arrangement. A wire holds the flower firmly in any desired position. Tubes afford an ample supply of water close to the rose.

Used at all English shows.
Price, each, 35c; doz., \$4.00.

Climbing Vines

CLEMATIS

Clematis is one of the most beautiful and useful climbers, the several varieties adapting themselves to every requirement. Their magnificent flowers, borne in greatest profusion in beautiful shades of lavenders, purples, reds and white, make them especially attractive. Clematis requires a rich loamy soil, but manure should not touch the roots. Cut out the weak and surplus branches in the spring, and tie the vine up well to its support. We offer the best of the hardy large flowering varieties.

RAMONA—Beautiful lavender, best of its color.
MONTANA—White, anemone-like flowers, May to July; very hardy, rapid grower.

HENRYII—Fine, large, creamy white flowers; a strong grower and very hardy.

JACKMANII—Intense violet-purple, with a rich velvety appearance; distinctly veined. The most popular and finest Clematis we have.

MAD. ED. ANDRE—A beautiful, new variety; flowers red, large and abundant.

Choice plants of above sorts, each 60c
 Large plants, each, 75c to \$1.00. postpaid

CLEMATIS PANICULATA—A strong rapid and vigorous grower; it produces sheets of medium-sized, pure white flowers of the most pleasing fragrance; it is perfectly hardy and well adapted for covering trellises or fences.

Choice plants, each, 35c to 50c; large, 40c to 60c.

Honeysuckle

BELGIAN—Flowers yellow, blotched with red above; blooms all summer, fragrant. Each, 50c.

JAPANESE—Evergreen; fragrant flowers, white changing yellow. Each, 35c.

HALL'S—Evergreen, very popular; white turning to yellow. Each, 50c.

English Ivy

Large, thick, shining, leathery leaves. Each, 25c.

Jasmine

JASMINE NUDIFLORUM—Branches drooping, enveloped with bright yellow flowers before leaves appear. Each, 50c.

GARDENIA FLOWERED, CAPE JASMINE—Free blooming, pure white flowers, star shaped; foliage delicate; evergreen. Each, 50c.

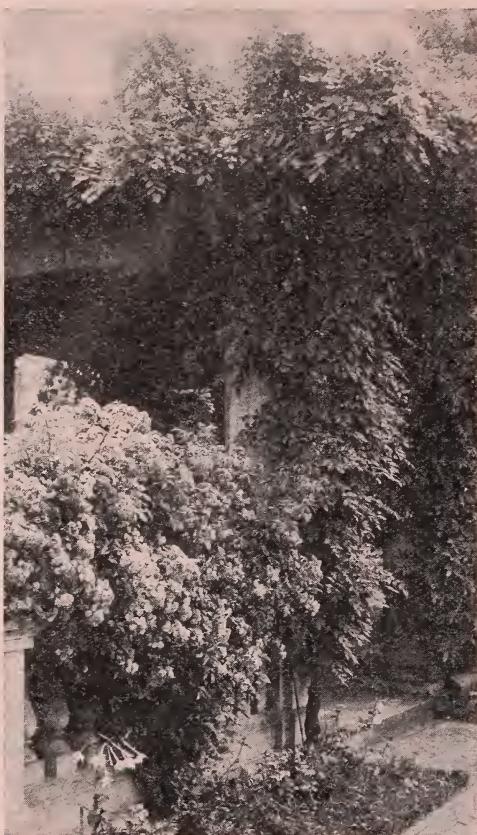
Wistaria

W. SINENSIS—Chinese Wistaria—One of the most elegant and rapid growing of all climbing plants; grows 15 to 20 feet in a season; has long pendulous clusters of pale blue flowers in May and June and in autumn.

Choice plants, each, 35c to 50c; large, 75c to \$1.50.

W. MULTIJUGA—Similar to above, but flowers are darker. Each, 75c to \$1.50

W. BRACHYBOTRYS—White flowering. Each, 75c to \$1.50



Ampelopsis

VEITCHII "Boston Ivy"—Leaves glossy green, coloring bronze in fall; flowers small; berries deep blue. 35c.

QUINQUEFOLIA "Virginia Creeper"—Common American Ivy. 35c.

Trumpet Vine

BIGNONIA GRANDIFLORA (Trumpet Vine)—Strong climber; deciduous; flowers orange-scarlet. 50c.

BIGNONIA TWEEDIANA—Evergreen, clinging; flowers canary yellow. 50c.

HARDY SPRING FLOWERING shrubs are inexpensive, require little care and will permanently add to the beauty and value of your home. For select list of Ornamental and Flowering Shrubs, Hollies, Evergreen, Fruit and Shade Trees see our 68-page Autumn Catalog. FREE on request.

DIAMOND PLANT FOOD

For Ferns, Palms and House Plants. Clean, Odorless, Highly Concentrated.

Produces Luxuriant Foliage—Brilliant and Lasting Flowers. A 25-cent package will feed a dozen large house plants a whole year. Price: 1/2-lb. Pkg., 15c; 1-lb., 25c.

See Postage Rates for your "ZONE" inside front cover.

Fruit Trees and Bushes

Our large 66-page Nursery Catalog contains a complete list with full description and illustrations of Fruit, Shade and Ornamental Trees, Shrubs, Climbers, etc. We would be pleased to mail a copy to anyone interested. We give below and on the following page a condensed price list. Order any varieties you want at following prices. We can supply all reliable and standard sorts.

Apples

	Each	Per	10
2 years	\$0.30	\$2.50	
1 year, 4 to 6 feet	.25	2.00	

Apricots

2 years	.35	3.00	
1 year, 4 to 6 feet	.25	2.25	
Select, 2 years	.40		

Cherries

2 years	.50	4.00	
1 year, 4 to 6 feet	.40	3.50	
Select, 2 years	.75		

Pears

	Each	Per	10
2 years	\$0.50	\$4.50	
1 year, 4 to 6 feet	.40	3.25	

Peaches

2 years	.35	3.00	
1 year, 4 to 6 feet	.25	2.00	
Select, 2 years old	.50		

Quince

2 years	.50	4.00	
1 year	.35	3.00	

Currants

	Each	10	100
2 years	\$0.15	\$1.25	\$10.00
1 year	.12	1.00	8.00
Extra large, selected bushes	.25	....

Grapes

	Each	10	100
2 years	\$0.15	\$1.25	\$10.00
1 year	.12	1.00	8.00
Extra large and strong roots	.25	....

Crab Apples

	Each	Per	10
Nice stocky trees	\$0.35	\$3.00	

Plums

2 years	.30	2.50
1 year, 4 to 6 feet	.25	2.00
Select, 2 to 3 years	.35	....

Prunes

2 years	.30	2.50
1 year, 4 to 6 feet	.25	2.00
Select, 2 to 3 years	.35	....

Raspberries—Red

	Each	Per	Per
Best Red Sorts, 2 year	\$0.08	\$0.75	\$4.00

Raspberries—Black Cap

	Each	Per	Per
Choice well-rooted plants	\$0.10	\$0.90	\$6.00
Low prices by the thousand.			

Gooseberries

	Each	Per	Per
2 years	\$0.12	\$1.00	\$8.00
1 year	.10	.80	5.00

Blackberries

	Each	Per	Per
Standard sorts	\$0.08	\$0.60	\$5.00
Oregon Evergreen	.15	1.25	10.00

Specialties in Berries for Market or Garden

"Conrath."—Best Early Black Cap

A black raspberry of superior quality, being ten days earlier than Gregg, coming in with the earliest reds. We especially recommend the Conrath as the best "blackcap" for Oregon. Try it. **Choice, well rooted plants, each, 15c; 10, \$1.15, postpaid.**

Freight or express, 10, \$1.00; 100, \$8.00.

Burbank's Phenomenal

Compared with the Logan the color and general form are much the same the first season, particularly if the growing conditions have not been favorable, but when once established they have no equal in size, quality or productiveness.

Prices: Two-year-old, 25c each; \$2.50 per doz., postpaid; by express or freight, \$12.50 per 100.

Logan Berry

(Raspberry-Blackberry.)

An exceedingly strong grower. The fruit is longer than the blackberry; color, dark red and produced in immense clusters. Has the flavor of both the blackberry and raspberry. Fruit ripens early, the bulk being gone before the blackberries or raspberries become plentiful.

Prices: Two-year-old, 20c each, postpaid; by express or freight, \$1.75 per doz.; \$10.00 per 100.

One-year-old (tips), 15c each; per 12, \$1.50, postpaid; by express or freight, \$1.00 per 10; \$8.00 per 100. Low prices by the thousand.

Dewberry, Lucretia

A trailing variety of the blackberry, ripening between the raspberry and the blackberry. Fruit, large, handsome, sweet and luscious.

Price: Each, 20c; per 10, \$1.50, postpaid. By express or freight, \$1.25 per 10; \$10.00 per 100.

Blackberry, Eldorado

A valuable new variety; fruit large, jet black, melting, sweet and rich; hardy and very productive for Oregon. **Postpaid, each .15c; 10, 1.25 by exp. or frt each, 10c; 10, 90c; 100, \$8.00.**

Himalaya Giant

An exceedingly strong, rampant grower of a trailing nature. A heavy cropper. The berries are large, juicy, coreless, sweet and firm, with a delicious aromatic flavor. Its deep rooting qualities enable it to produce a large, firm berry even in a very dry season.

Each, 20c; dozen, \$2.00, postpaid. Freight or express, each, 15c; doz., \$1.50; 100, \$10.00.

New Mammoth

This wonderful blackberry is a vigorous grower of trailing habit; the foliage is large, thick, of a deep green color. It is enormously productive and exceedingly early, ripening three weeks before other cultivated kinds. Seeds small, soft and abundant; cores small and soft. In size and flavor it surpasses all other varieties of blackberries.

Prices: Two years old, each, 25c; 10, postpaid, \$2.00; 10, by express or freight, \$1.75; 100, \$15.00.

One year old (tips), each, 15c; 10, \$1.25, postpaid; by express or freight, 10, \$1.00; 100, \$8.00.

The Improved Superlative

Raspberry

The color is a velvety red crimson. The berry large and firm, with very small, brittle seeds. Its immense size, uniformity and lucious flavor make "Superlative" peerless among raspberries, is firm, disease-resisting and nearly a week earlier than the Cuthbert in ripening.

Price: Each, 20c; doz., \$2.00, postpaid; freight or express, 100, \$12.50.

"DIAMOND
QUALITY"

STRAWBERRY PLANTS



In setting, trim roots as indicated by line in illustration.

STRAWBERRY PLANTS are a great specialty with us, and our select strains of **New Oregon**, **Gold Dollar**, **Marshall**, **New Acme**, **Magoon**, **Clark's Seedling** and other Western varieties, many of which were introduced by ourselves, still hold their position as the **leading commercial varieties of the Northwest**, and are being planted more extensively each season. Thus demonstrating by actual market and growing tests the great superiority of our Western varieties, against the keenest competition from all sections.

"**Diamond Quality**" **Strawberry Plants** are large, vigorous and healthy. They are heavily rooted and have large, full crowns; have been carefully grown, and are free from disease and pests. We dig as ordered and pack for shipment in ventilated crates of 500 plants each, crowns up. **They are grown from our select strains and are always true to name; no substitution** is ever allowed without the full knowledge of the purchaser.

Better Strawberries or larger crops are not produced anywhere than right here in the Northwest, and the handsomest—firmest—best colored—richest flavored strawberries are our western varieties.

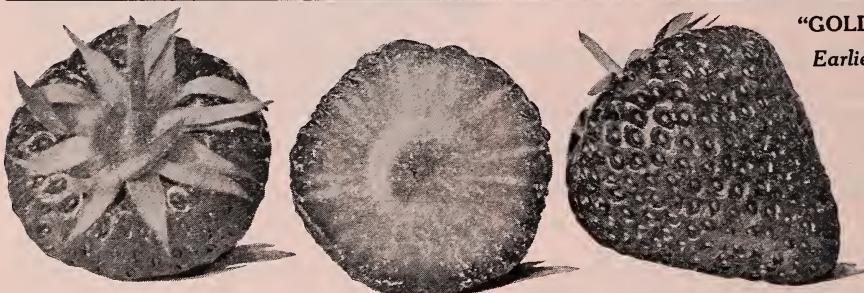
THEY ARE BEST for WESTERN GROWERS

Care For and Feed Your Plants

Neglect is the prime factor in strawberry failures, and most strawberry beds suffer from lack of attention and starvation. Proper fertilization and intelligent culture insure enormous crops of finest fruit and freedom from diseases and pests. White grubs, cutworms, crown miners, etc., can all be controlled by preventive measures. Never set strawberries in or near clover sod or hay fields. Such ground should have at least two years cultivation before using

for strawberries. Remove the mulch directly after fruiting. This helps to control many evils. For helpful details of care and culture, see our **Strawberry Booklet, 32 pages, sent free on request.**

The strawberries here offered have all stood the market test and you will be safe in selecting any one of them that will suit your conditions and requirements. They are the best varieties obtainable.



"GOLD DOLLAR"

Earliest and Best

of All

Early

Strawberries

Always

Solid

Clear

Through

Gold Dollar—Extra Early

No early strawberry has ever been grown that equals our special strain of "Gold Dollars."

Gold Dollar berries are large size, dark red all through and have a fine flavor. Foliage heavy, large and spreading, which protects the blooms from early frosts. Has a perfect bloom, and strong stems that hold the berries up from the ground, which helps to keep color and flavor during the early rainy season.

Gold Dollar Strawberries are the standard early berry in the big markets of the Northwest and are always in demand. They are sure, heavy croppers, keep up their size throughout the season, and command the highest early prices. They are the handsomest, most prolific early strawberry.

A SURPRISE TO EVERYONE

Stevenson, Wn., 1-15-12

Gentlemen:

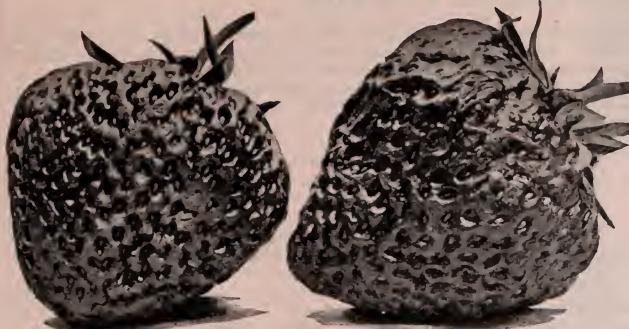
The New Oregon Improved Strawberry is entirely satisfactory and has been a surprise to everyone that has seen them growing or after they were grown. I picked \$95.00 worth from 21 sq. rods of ground without using any fertilizer whatever. They were sold in the local market at an average of \$2.45 per crate. From twelve crates of the first picking there was not a pound box of culs and they hold their size well through the whole season. My patrons of a year ago many of them bought first-class berries last season for canning as they considered them cheaper and much superior to any other variety on the market, and when people once use them that settled it as they wanted no others. I sell all I am able to raise in our home market and then some. Well, to make a long story short, I can't say too much in their praise.

Yours truly,

J. Graves.

"Diamond" No. 4 — The Best Fertilizer for Strawberries. Our Fertilizer Book tells why. Ask for a copy. **Sent FREE**

STRAWBERRY PLANTS—Continued



Our Own Introduction

"NEW OREGON"

*Best, Most Uniform,
and Heaviest
Yielding Main Crop
Strawberry*

"**NEW OREGON**" is large, firm and of fine form, averaging 15 to the quart box, color a brilliant, deep, rich red, having a glossy varnished appearance when fully ripe. This dark blood red coloring extends through to the very center, and, no matter how large, the "**NEW OREGON**" is never hollow. When fully ripe "**NEW OREGON**" has distinctive flavor suggestive of the wild berry, is crisp and delicious, and will remain on the vine for three days without injury, keeping perfectly for many days after picking stands handling and long shipments and will hold its color, shape and flavor when canned.

"**NEW OREGON**" is an early and continuous bearer, being ready for marketing the first half of May in the Willamette Valley and holds up in size and quality throughout the season, which in some localities extends until frost.

"**NEW OREGON**" is a healthy, vigorous grower with luxuriant foliage, but has a marked characteristic of setting few runners. For this reason plants of the true strain cost a little more than other sorts. We introduced "**NEW OREGON**" in 1902 and growing tests with every promising variety obtainable have demonstrated its superiority.

Mr. Finnigan, the "Strawberry King," uses the "**NEW OREGON**" for his fancy pack, and picked 16,872 boxes from two acres in one season. See price list below.

To be sure of receiving the original strain of genuine "**NEW OREGON**" Strawberries send your orders direct to us.

Popular and Best Western Sorts

Marshall

One of the best all-round strawberries; very large; dark crimson throughout; fine flavor; a fine market and table berry.

Clark's Seedling

The berry that has made Hood River famous; best shipper; berries large, firm and of delicious flavor; vines bear large crops; is especially adapted to dry soil.

Admiral Dewey

Color, beautiful dark red, extending to the center; no white core; shape conical, much like Clark's Seedling; of excellent flavor; a very early, abundant and continuous bearer; might be classed as an ever-bearing.

Wilson

An old standard variety; a heavy bearer of fine, moderate sized berries; sharp acid flavor and the leading sort for canning.

New Acme

For growers who have a distant market, or who require a firmer berry than any before known "New Acme" is especially recommended.

The Acme is a seedling of large size and same general form as the well known "Clark," but of much richer, more brilliant color. The seeds, being very prominent and of a rich golden yellow, give the berry a strikingly handsome, distinctive appearance. It ripens early and is a heavy cropper. Berries remarkably uniform in size and shape; are also very firm, of finest quality, stand handling better and keep longer than any other strawberry.

Magoon

Originated near Portland; berry large, fine and excellent; sub-acid flavor; bears heavily throughout the season; especially adapted to Western Oregon and Washington.

Gandy

A profitable market sort; its season is late to very late, being in its prime when most other sorts are gone. The fruit is large, handsome and uniform, and makes an excellent showing on the market.

By express or freight packed in ventilated crates.

PRICE LIST OF PLANTS.

	Dozen	100	100	1000
Acme	\$0.30	\$1.00	\$0.75	\$6.00
Admiral Dewey .....	.30	1.00	.60	4.50
Clark's Seedling .....	.30	1.00	.60	4.50
Gandy .....	.30	1.00	.75	5.00
Gold Dollar .....	.30	1.00	.75	4.50
Magoon .....	.	1.00	.60	4.50
Marshall .....	.30	1.00	.60	4.50
NEW OREGON—IMPROVED .....	.30	1.00	.75	5.00
Wilson .....	.30	1.00	.60	4.50

Not less than 500 plants of a kind at 1000 rate. Special prices on 3000 or more.

FREE

ON REQUEST, OUR 32-PAGE BOOK ON STRAWBERRY CULTURE
Complete and up-to-date. Things you should know about Strawberries.

FREE

Vegetable Plants

WE grow large quantities of vegetables plants, and can supply all the kinds listed below, in their proper season, in most any quantity. We have made arrangements this year so that we can supply all vegetable plants in two grades. If you want a quantity of plants write us early.

Transplanted plants are much stronger and better rooted, and are well worth the price, especially in the early part of the season. We can supply most any of the leading sorts. No plants sent C. O. D.

Write for prices in large quantities.

	Postpaid	By express	Dozen	100	1000	Postpaid	By express	Dozen	100	1000
CELERY—						CAULIFLOWER—				
Leading kinds, transplanted	\$0.30	\$1.00	\$7.00			Early Snowball, transplanted	\$0.30	\$1.25	\$8.00	
Not transplanted.....			.50	5.00		Not transplanted.....		1.00	7.00	
	Postpaid	By express	Dozen	100	1000	Late kinds, transplanted.....	.30	1.00	7.00	
TOMATOES—						Late kinds, not transplanted		.75	6.00	
Leading kinds, transplanted	\$0.30	\$1.00	\$7.00			Add 25c per 100 for Cauliflower Plants by mail.				
Not transplanted.....			.75	6.00						
	Postpaid	By express	Dozen	100	1000	CABBAGE—				
SWEET POTATO PLANTS	\$0.30	\$1.00	\$7.00			Early or late kinds, transplanted.....	\$0.20	\$0.75	\$6.00	
Add 25c per 100 for above Plants by mail.						Not transplanted.....		.50	4.00	
CHIVES (Schnittlauch), per bunch.....				25c.		Add 25c per 100 for Cabbage Plants by mail.				

ROOTS

Hop Vines

ENGLISH CLUSTER—The best sort.

Strong roots, postpaid, 5c each; 40c per dozen. By express, 25c per dozen; \$1.50 per 100.

Write for prices if wanted by the 1000.

Horse Radish

Postpaid, 5c each; 40c per dozen. By express or freight, 25c per dozen; \$1.50 per 100. Write for prices by the 1000.

Asparagus

ONE-YEAR-OLD PLANTS—Postpaid, 25c doz., 75c per 50; \$1.00 per 100; By express or freight 20c dozen; 50c per 50; 75c per 100; \$6.00 per 1000.

TWO-YEAR-OLD PLANTS—Postpaid, 40c per dozen; \$1.00 per 50; \$1.50 per 100; By express or freight, 25c dozen; 75c per 50; \$1.00 per 100; \$8.00 per 1000.

Rhubarb, or Pie Plant

GIANT—BEST HARDY VARIETY.

ONE-YEAR-OLD ROOTS—Postpaid, 8c each; 75c per dozen. By express or freight, 50c per dozen; \$3.00 per 100.

TWO-YEAR-OLD ROOTS—Postpaid, 15c each; \$1.50 per dozen. By express or freight, 85c per dozen; \$6.00 per 100.

If wanted in larger quantities write for special prices.

NOTE—We advise our customers to order the above roots by express or freight, if possible, as it enables us to send much larger and better rooted plants, at a less cost to the buyer.

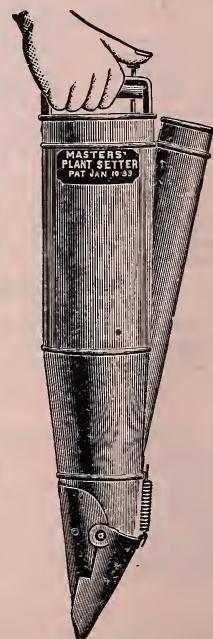
Farm Tools

Master's Plant Setter

For planting Cabbage, Tobacco, Celery and small plants of any kind. With this handy little tool you can set, water and fertilize ten thousand plants per day.

You carry the planter in your right hand and drop the plants into it with your left. Each plant is securely set and the work is performed as fast as you walk. The first thing you do after the planter jaws are in the ground is to touch off the water, then drop the plant into the plant tube, give the planter a half-turn to the right, at the same time pressing down with the thumb lever. This will throw plenty of earth into the bottom of the hole on top of the roots and water, which will settle about the roots of the plant as the water soaks away, and at the same time fasten the little roots air-tight at the bottom of the hole, which is the secret of all plant setting. The upper part of the hole will fill itself by the action of the weather, and the plant will start growing much quicker than if set by hand. THE GROUND SHOULD BE DRY AND WELL HARROWED.

Absolutely sure in its work; no resetting; every plant watered and your field will all grow and come on evenly. By a light pressure of the thumb enough water is released for each plant: two barrels required for an acre in dry weather. You can mix fertilizer with the water, or use liquid manure. This planter is built entirely of sheet metal and steel. The manufacturers of the planter set from 30 to 50 acres of cabbage plants each year. It is simple, durable, practical and sure in its work.



A McWhorter Fertilizer Drill puts the Fertilizer just where you want

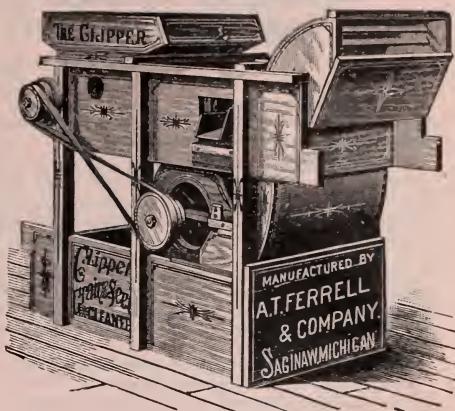
It. No loss, no waste. Spreads 200 pounds to over a ton per acre broadcast or along the row. Adjusted instantly. See page 45.

The Clipper Grain, Seed and Bean Cleaner

This is without doubt the best seed and grain cleaner on the market today. When it comes to doing real nice, clean work, it is far ahead of all the others. The "Clipper" is especially adapted for making effectual separation of wild oats, cheat, cockle and all foreign seed from wheat and oats, plantain from clover, etc., etc., as well as cleaning and grading the perfect seed. Other manufacturers depend entirely upon screens for this work and with unsatisfactory results. The "Clipper" however, screens all straw and foreign matter from the grain before it enters the air shaft, and the "Vertical Blast" does the rest. The screens are so arranged as to be in plain view, and of easy access to the operator while machine is in operation. Seed dealers every where use the "Clipper," because it is the best. We buy these cleaners in carload lots and have both hand and power mills. **Descriptive pamphlet and catalog sent on request.**

Price: No. 1, \$26.00; No. 2, \$35.00.

We have four Clipper Cleaners in use in our warehouse, because they are the best cleaners made and the only ones that will clean and grade all kinds of grass, vegetables or farm seeds.



We have supplied "Clipper Cleaners" to the mills, dealers and prominent growers of the Northwest. If you grow grain or seed and do not own a "Clipper," you are losing many times its cost every year. Let us send you our "Clipper" Catalog. All sizes and prices.



CAHOON

The standard broadcast seed sower of the world, made of steel, iron and brass and with ordinary care will last a lifetime. This machine is the most popular. It has a force feed and does excellent work. Instructions with each machine.

Every Farmer Should Have One.

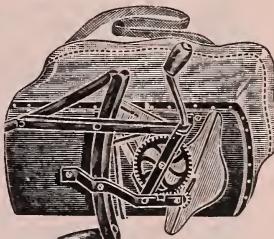
Little Giant

The best cheap seeder on the market, made in three sizes.

No. 3 Improved.....	\$2 25
No. 3	2 00
No. 4	1 65

Cahoon

This is the standard broadcast seed sower of the world, made of steel, iron and brass and with ordinary care will last a lifetime. This machine is the most popular. It has a force feed and does excellent work. Instructions with each machine.



LITTLE GIANT

Potato Planters

Peerless. (Fig. 16)

This is the lightest and best tubular planter made. With this planter one man can plant several times as much ground without getting a lame back as he can plant by hand. The planter locks itself as it is lifted out of the ground, so that the next potato may be dropped in at once, and opens automatically as the top of it is moved forward in walking. (See cut.)

Price, \$1.50.

Pingree or Acme. (Fig. 14)

Practically the same as the Peerless without the tube down the handle. You lift the planter up and drop the potato in the lower part. It is light and a very satisfactory planter. (See cut.)

Price, \$1.00.



Corn Planters

Gordon Automatic. (Fig. 20)

Decidedly the best hand corn planter made, and a very desirable implement for those who have a quantity of corn to plant. It puts the corn (the right number of kernels) exactly where you want it, and at a proper depth. It is light, handy, automatic, easily worked, requiring only one hand (either one), and a most satisfactory tool in every way. See cut.

Price, \$1.75.

Fig. 14 Fig. 16

Fig. 20 Fig. 22

Acme. (Fig. 22)

A two-hand planter; light, strong and durable. Especially adapted for planting in heavy, cloddy or stony soils. The seed dropper of the Acme is a straight slide, which vibrates horizontally and will drop seeds ranging from pop corn to large kidney beans. Made with spring, brass cut-off and steel blades. (See cut.)

Price, \$1.00.

Sprays, Spray Material and Washes



Liquid sprays cannot be mailed. Solid sprays, extra for postage.

Scalecide

The best commercial spray for San Jose scale and all soft-bodied, sucking insects. Also contains a powerful fungicide, which will control all fungus diseases that are controllable in the dormant season.

This assertion is not based on a single test on ten or a dozen trees, but on actual work in great commercial orchards, where thousands of gallons of spray were used. "Scalecide" is a petroleum oil that mixes at once with cold water in any proportion, and stays mixed. It is not necessary to use an extra tank or barrel, and no hot water should be used. Can be prepared in an instant at the spring or creek nearest to the orchard by simply adding one gallon of "Scalecide" for every fifteen or twenty gallons of water, right into your spray tank. No crude oil is used in the manufacture of "Scalecide," all the light and heavy oils that might prove injurious being removed—but all of the soluble sulphur is retained; this has the insecticidal value. That "Scalecide" is an absolutely unfailing remedy for San Jose Scale is attested to by thousands who have used it. Price per qt., 35c; gal., \$1.00; 5 gals., \$4.00; 10 gals., \$7.50. 50-gal. barrel, 28.50. Send for free sample and printed matter concerning "Scalecide."

PORLAND SEED COMPANY'S

Aphisicide

Best Summer Spray for Roses

The cleanest, surest, safest spray for aphis, thrip, or any insect life on plants of any kind. You can use it on your house plants. It is odorless, colorless, and will not stain the most delicate fabric, nor injure your plants in any way. It is instantly effective.

Price, qt., 25c; gal. 60c.

Diamond Lime and Sulphur Solution

For San Jose Scale.

You can not afford to risk a cheap open kettle product. Be safe. Use the best—it's cheapest.

Diamond Lime and Sulphur Solution is prepared in pressure tanks by steam, and is always uniform and of the highest efficiency.

The "Lime and Sulphur" Solution for San Jose scale is endorsed by experimental stations and state horticultural societies of all the fruit-growing states. It is recognized and recommended as the best known preparation for exterminating San Jose scale on all deciduous trees.

Our Lime and Sulphur Solution tests 30 Baume Scale, is made of the purest and best quality of Sublimed Sulphur and of Lime that tests 99.98 per cent pure. It is a clear, deep cherry colored liquid free from sediment and is a beautiful product, is very reasonable in price, and its work is perfect. It is all ready to mix just as you get it. Merely add 11 gallons of water with each gallon of the Lime and Sulphur Solution. There is no sediment to clog the sprayers. No boiling to be done, which saves fuel, time, labor and annoyance. It is always alike and uniform in strength and results.

Price, 1 gal., 50c; 5 gals., \$1.75; 10 gals., \$3.40; 50-gal. bbl., \$8.50.

ARSENATE OF LEAD. The best and latest insecticide for all leaf-eating insects, it will not burn the foliage, and stays on the trees longer than any other spray made.

1-lb. can 20c; 2-lb. can 40c; 5-lb. can 90c; 10 lbs., \$1.50; 25 lbs., \$3.00; 50-lb. keg, \$5.65; 100 lb. keg, \$10.00.

BLUE LABEL SLUG DESTROYER. This is the first powder of its kind that we ever found to positively kill slugs and keep them away from young plants. Full directions on each package. Put up in 25c, 50c, and \$1.00 packages.

25c package will be sent by mail, postpaid, for 35c.

TREE TANGLEFOOT

FOR CATERPILLARS, MOTHS AND WORMS.

Price, 1 lb., 30c; 3 lbs., 85c; 10 lbs., \$2.65; 20 lbs., \$4.80
PROTECTS AGAINST ALL CLIMBING INSECTS. 1 LB. MAKES A BAND 9 FEET LONG.

NOTE.—To make standard hop spray, use 1 lb., each Quassia Chips and Whale Oil Soap with 8 gallons of water.

BORDEAUX MIXTURE. For fungi. In liquid form. Dilute with 49 parts of water.

1 qt., 50c; 1 gal., \$1.60.

BLUESTONE (Vitriol).

Lb., 10c; per 100 lbs., market price.

BUG DEATH. A non-poisonous insect-killing powder that is in high favor among gardeners for cabbage, tomato and cucumber bugs, etc. Use 12 lbs. per acre. Lb., 20c; 5 lbs., 85c.

FIR TREE OIL SOAP. For killing green aphis. ½-lb. can, 25c; 2 lbs., 75c.

HAMMOND'S SLUG SHOT. For destroying slugs, cabbage and turnip flea, currant worms, etc. Per lb., 15c; 5-lb. pkg., 50c.

HAMMOND'S GRAPE DUST. To prevent mildew on roses, grapes, and gooseberries. Per lb., 15c; 5-lb. pkg., 50c.

HELLEBORE. ¼ lb., 15c; ½ lb., 20c; lb., 35c.

KEROSENE EMULSION. An excellent spray for wooly aphis and clover mite. Qt., 50c; 4 qts., \$1.25.

NICOTICIDE. The best fumigator and spray for greenhouse work. Kills aphis, red spider, mealy bug, thrip, etc.

Pint can, \$2.50; qt., \$4.50; gal., \$15.00.

POTASSIUM SULPHIDE—(Liver of Sulphur).

One of the best preventives of mildew on roses and berry bushes. Dissolve ½ oz in one gallon of hot water. When cold apply as a spray.

Price, 1 oz., 10c; 1-lb. can, \$0.50.

PARIS GREEN—Lion Brand. The standard of purity. Guaranteed superior to all other makes.

Price, ¼ lb., 15c; ½ lb., 25c; lb., 40c; 2 lb., 75c

BLACK LEAF "40"—Latest and best tobacco spray. 1 lb. makes 170 gals.

½ lb. can 85c; 2 ½ lbs. \$3.25; 10 ½ lbs. \$12.50.

QUASSIA CHIPS. Generally used with Whale Oil Soap for plant lice, etc.

1 lb., 10c.

WHALE OIL SOAP. For aphis, plant lice, etc. 1 lb., 10c; 100 lbs., \$6.75.

SULPHUR, Powder.

Lb., 5c; 100 lbs., market price.

TOBACCO STEMS. Lb., 5c; per 100 lbs., \$2.50.

TOBACCO DUST.

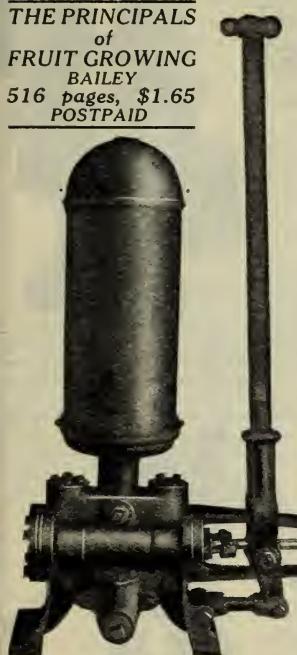
Lb., 10c; 10 lbs., 75c; 100 lbs., \$5.75.

GOULDS SPRAY PUMPS

We are General Agents for the Gould Sprayers, guaranteed to be the best built, most lasting and of the highest efficiency. They are the recognized standard.

Every grower of fruit, berries, or flowers should have a good spray pump of some kind, one suited to the work that is to be done. If you want to get the best results, you must spray and spray often. Remember, a person derives the same satisfaction from using a good spray pump that he does from using a good article of any other kind; so when you buy get one of the following up-to-date and reliable outfits.

**THE PRINCIPALS
of
FRUIT GROWING**
BAILEY
**516 pages, \$1.65
POSTPAID**



Gould's "ADMIRAL" Double Acting Sprayer

For Large Orchards, Parks, Groves, Etc.—Very Powerful.

The "Admiral" is double acting and produces a steady stream at the nozzle, is built for continuous hard work and high pressure. Especially designed for large orchards, and will meet every requirement. The brass cylinder lining is of heavy seamless tubing, with a cast bronze cylinder head, and can be easily removed, as shown in the engraving. This is an important feature, as the gritty nature of many of the spray mixtures has a tendency to cut the cylinder lining, and when it is badly worn it can be replaced at small cost. The valves are all brass, and each one in a separate valve box. They are easily reached by removing the bronze valve box covers. The brass piston rod is outside guided, making a perfectly straight thrust through the stuffing box, which is outside packed.

The removable malleable iron lever is long and powerful, and with the large air chamber a high pressure can be easily maintained. Suction can be taken from either side of the pump, and there are two discharge openings fitted for $\frac{1}{2}$ -inch hose. When ordered without hose or nozzle, both discharges have half couplings for $\frac{1}{2}$ -inch hose and a brass strainer.

This Sprayer is of sufficient capacity to supply, if necessary, four leads of hose, or two leads, each with two, three or four nozzles, and will be found fully as serviceable as a power sprayer for orchards not large enough to warrant the purchase of a power outfit.

This same pump fitted with a pitman in place of lever for connection to gasoline engine.

Outfit A.—Pump only, with strainer and suction hose coupling \$30.00

Outfit B.—Pump with 8 feet suction hose and strainer 32.75

Outfit C.—Pump with 8 feet suction hose, two 25-foot leads best $\frac{3}{4}$ -inch hose, two 8-foot bamboo extensions, with Globe valves and nozzles 40.00

Admiral Pump with **3-inch cylinder** furnished on any of above outfits for \$5.00 extra. **For pressure gauge, add \$1.50.**

POWER OUTFITS

We assemble outfits in any manner desired by customer, and will suggest the right attachments for special purposes. Attaching any standard engine specified. Write us your requirements. We can save you money and guarantee a satisfactory equipment.

SCALECIDE
Spreads and Penetrates
Safe, Efficient, Economical
Will not Injure Your Face
or Equipment

Apples from trees sprayed with "SCALECIDE" took all the first prizes at the Pennsylvania Horticultural Society Meeting; all the first prizes both this year and last at the New Jersey Horticultural Society Meeting; a long list of sweepstakes and first prizes at the New England Fruit Show in Boston; also first prize at the Ohio State Fair, Connecticut State Fair at Hartford, and Pomological Society Meeting at Berlin, Conn. and a Gold Medal was awarded Scalecide at the National Horticultural Congress, Council Bluffs, Iowa.

FREE SAMPLE and Interesting Information on Request

BOOKS ON SPRAYING

See Pages 46-47

GOULDS
"ADMIRAL"
Hand or
Power



SPRAY PUMPS AND SPRAYERS—Continued

Monarch Two-Cylinder Spray Pump

Fig. 1506.—**Monarch**—This pump has many advantages, and we believe it is the best of the large pumps. The main advantages are: First, the long lever, which can be shifted to pull or push, or to lift or drop, and can be changed by the operator any time he desires a relief; second, pump stands outside of the barrel, and all parts can be easily looked after; third, cylinders are perpendicular, and any grit will not lie against the plunger to wear it or the packing out, as in the case with the horizontal cylinders; fourth, there are no valves in the plungers; the packing is on the outside, and can be tightened any time, without taking anything to pieces; fifth, the four brass valves (each one by itself and under a separate cap), can be reached by merely unscrewing the cap, and without disturbing the rest of the pump.

Outfit A, pump only, including strainer and hose connection,	\$24.25
Outfit B, coupled with 6 feet $\frac{1}{4}$-inch suction hose	26.00
Outfit C, pump, suction hose, 25 feet best $\frac{1}{2}$-inch spray hose, 8-foot bamboo extension, Globe valve and nozzle	33.00
For pressure gauge, add \$1.50.	

Take Care of Your Sprayer

Always empty remaining solution, and pump through some clean water after using. Clean thoroughly before putting away at end of season.

Never leave sprayers where they will freeze; if the cylinders are iron they are apt to crack and if brass they will expand.



Spreads and Penetrates

An inexperienced or careless man can do a thorough job with **Scalecide** where he would fail to get a good distribution with Lime and Sulphur. **Page 97.** Fig. 1506. MONARCH

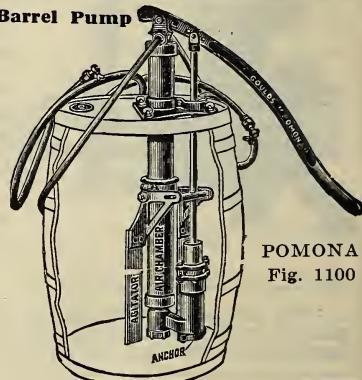
We recommend the use of a pressure gauge on all large pumps, as it accurately tells the force of spray when delivered.

Gould's Pomona—Our Leading Barrel Pump

Fig. 1100.—“**Pomona**” Spray Pump has won for itself an enviable reputation. We毫不犹豫地 offer it as the best orchard spray pump for mounting in a barrel. It has great power and capacity. Briefly stated, other points of superiority are: No leather packings, consequently no hardened and useless valves. All working parts bronze, including plunger, gland, valves, valve seats, etc. Plunger is outside packed. Valves are easily accessible. Air chamber is very large and of steel, free from imperfections of cast iron. Lever long and powerful, with adjustable stroke, three, four or five inches. The agitator, as shown in the cut, is operated by the stroke of the handle, so whenever any liquid is pumped it is thoroughly agitated. Pump is held securely by small anchor located at bottom of barrel, and by adjustable clamp plate at the top. New plate admits insertion or withdrawal from barrel without removing the agitator.

Outfit A.—Pump only **\$15.00**

Outfit B.—Pump with 12 $\frac{1}{2}$ feet $\frac{1}{2}$ -inch best 5-ply spray hose, one Vermorel nozzle, one 8-foot bamboo extension, with cut-off, all complete **19.25**



POMONA
Fig. 1100

Outfit C.—Same as Outfit B, except we furnish a good hardwood barrel and mount the outfit **\$21.75**

Outfit D.—This is our regular Pomona outfit, the best barrel pump outfit that can be bought. It consists of one No. 1100 pump with two 12 $\frac{1}{2}$ -foot leads of best 5-ply spray hose, two Vermorel or Seneca nozzles, two 8-foot bamboo extensions, with cut-off; all in working order and mounted in barrel **25.00**

Fruitall

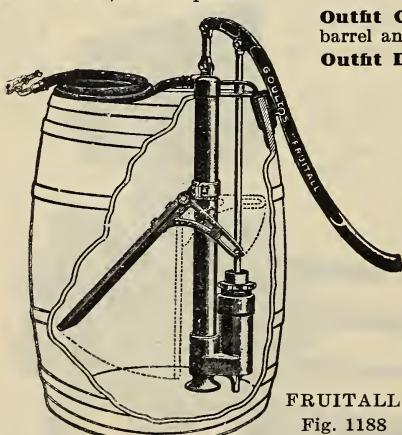
Fig. 1188.—“**Fruitall**” Spray Pump is made on the same general lines as our famous “Pomona.” It is, however, made lighter and of smaller capacity. All working parts, including plunger, gland, valves, valve seats and strainer are made of brass. Pump is held in barrel by anchor at bottom and adjustable clamp at top, fitting over end of stave. Not made for side of barrel.

Outfit A.—Pump only **\$11.00**

Outfit B.—Pump with 12 $\frac{1}{2}$ feet 5-ply spray hose and one Vermorel nozzle, all complete **14.00**

Outfit C.—Pump mounted in barrel. 15 feet 4-ply hose, 8-ft. bamboo nozzle and cut off, all complete **17.75**

NOTE.—Extra 5-ply hose at 13 $\frac{1}{2}$ cents per foot.



FRUITALL

Fig. 1188

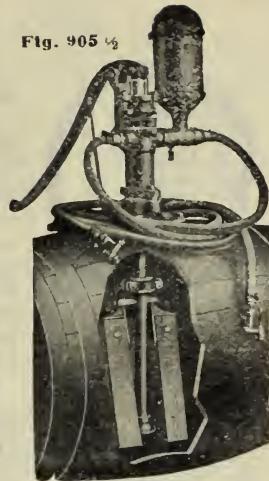
Planet Jr. Special Orchard Cultivators Are Strong, Light, Easy Running, Durable, Adapted to Every Need—Page 110.

SPRAY PUMPS AND SPRAYERS—Continued**Gould's Standard Sprayer****Powerful, Large Capacity, Durable.**

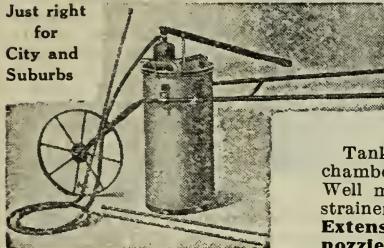
The "Standard" Sprayer is made with a 2 $\frac{1}{2}$ -inch cylinder. The cylinder is brass-lined, the plunger brass-encased and the valves are brass, making all working parts proof against the spraying mixtures. The plunger is easily repacked without taking the sprayer to pieces, and is unusually large, known as a "differential" plunger, which produces a continuous stream of liquid from the nozzle, similar to the action of a double-action pump. The large standard provides an ample air chamber. The base is made so as to fit either the end or side of a barrel.

Outfit A. —Pump and strainer only.....	\$ 7.50
Outfit B. —Pump with agitator and suction pipe.....	9.00
Outfit C. —Same as B, with 1 12 $\frac{1}{2}$ -foot lead of hose and nozzle.....	12.00
Outfit D. —Same as C, with 2 12 $\frac{1}{2}$ -foot leads of hose and nozzles.....	\$15.75
Outfit E. —Same as D, with 2 bamboo extensions and globe valves.....	18.50

We supply a barrel and mount sprayer for \$2.50 extra.

Fig. 905 $\frac{1}{2}$ 

Just right
for
City and
Suburbs

**"Ideal" Spraying Outfit**

The "Ideal" has been designed for small growers, city and suburban homes, and for all purposes where nothing as large as a barrel or power outfit is needed, and is the right outfit for the poultryman who does much regular spraying or white washing

Is Light, Compact, Easy to Operate.

Tank holds 15 gallons; will not slop or spill. Pump has large air chamber. Bronze ball valves; valves are removable, cannot clog. Well made; gives a pressure of 150 lbs; has mechanical agitator and strainer for suction. **Outfit complete, 10 ft. 3-8 inch hose, 10-ft. Extension in three pieces, one T-handle shut-off, one "Ideal" nozzle; shipping weight, crated, 60 pounds. Price, \$20.00.**

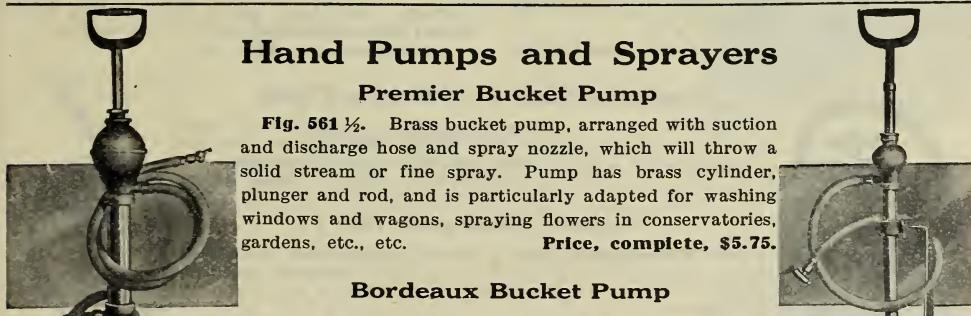
**Hand Pumps and Sprayers****Premier Bucket Pump**

Fig. 561 $\frac{1}{2}$. Brass bucket pump, arranged with suction and discharge hose and spray nozzle, which will throw a solid stream or fine spray. Pump has brass cylinder, plunger and rod, and is particularly adapted for washing windows and wagons, spraying flowers in conservatories, gardens, etc., etc.

Price, complete, \$5.75.

Bordeaux Bucket Pump

Fig. 1129. Brass garden and spray pump; is especially designed for spraying in gardens and greenhouses. The pump is double action in effect; Seneca nozzle, ball valves; proof against the action of acids and oils. Footpiece is malleable iron. Pump is set in pail or bucket, with foot outside. Weight, 6 $\frac{1}{2}$ lbs. **Price, complete, \$4.50.**

FIG. 1129.

Portland Seed Company's Handy Carts
All Metal Parts Malleable Steel, Strong, Light, Easy to Wheel

NO. 1 PLATFORM. Best cart for general use. Will carry four large milk cans, sacks of potatoes, wood, barrels, in fact, anything heavy can be easily and quickly handled. Platform 27x30 inches; 36-inch wheel; 2 $\frac{1}{2}$ inch elliptical tire. Neatly finished and painted. Weight complete, K. D., 85 pounds.

Price, \$8.75.

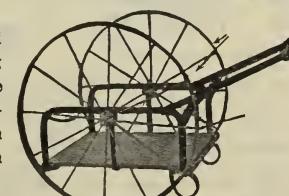
No. 4 Barrel Cart

Will pick up any kind or size of barrel from a lime to large spray barrel, holding it firmly; no attachment necessary on the barrel. Contents can be emptied by simply raising the handles. Has 36-inch wheels, 2 $\frac{1}{2}$ -inch elliptical rims, 7-8 inch steel axle; weighs, K. D., 70 pounds.

Price, \$8.00.



NO. 4 BARRELL

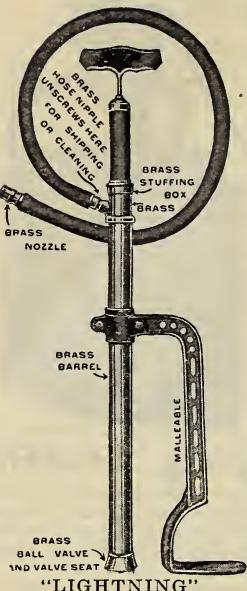


NO. 1 PLATFORM

**PORLAND SEED COMPANY'S
SPRAY PUMPS AND SPRAYERS—Continued**

LIGHTNING Fig. 29

All Brass Bucket Pump



Brass Ball valves. Brass Plunger—handle and stirrup malleable iron. 3 feet of best hose, two brass nozzles, one for spray and one that will throw a stream of water. Has large air chamber making possible a pressure of 50 to 100 lbs. The best value offered in a bucket pump.

Price, each, \$3.00

"HOW to Spray, WHEN to Spray, and WHAT SPRAYERS to Use."

Tells all about sprays and sprayers, and how to make the best "white wash."

Ask for a Copy.

Kinney Siphon Pump

No florist or gardener can afford to be without this practical device. It is invaluable for applying liquid manure spraying, tempering water or drawing water out of furnace pits; made of solid brass; will last a lifetime. Weight, 1 1/4 lbs.

Price, each, \$2.50.



**A BARGAIN!
"BANNER"
Compressed Air
SPRAYERS**

Only \$4.00

The **Banner** holds four gallons, is made with double-flanged heads, to stand a heavy pressure; is 7 inches in diameter, by 21 inches in height. The pump is made of heavy brass and screwed in with heavy machine cut threads.

The **Banner** is provided with a safety valve to prevent overpressure. The automatic lever nozzle is made of solid brass, is the latest improvement in nozzles, and will throw a stream of fine spray with no waste.

**Price: Galv. Iron, \$4.00; Solid Brass, \$5.00.
3-foot Brass Extension Rods extra, each, 50c.**

Order early—only a few left.

Portland Seed Co.'s Bucket Pump

This little pump is very convenient for all sorts of small work. Has brass cylinder and valves, two nozzles, for fine or coarse work. The best low-priced pump on the market.

Weight, 6 lbs. **Price, \$2.75.**

Brown Auto-Spray No. 1

The "Auto-Spray" No. 1, works automatically for six to fifteen minutes. Two pumpings will usually discharge the entire contents. Simply fill two-thirds full of solution and pump up air pressure.

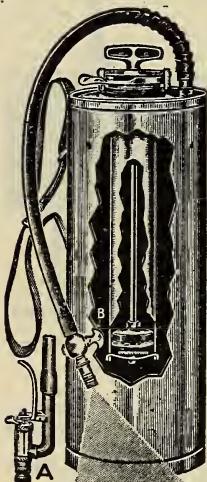
No other style of sprayer will do such a variety of work and do it so well. We recommend it for shrubs and vines, greenhouses, poultry houses, hospitals and stables for disinfectants, for sheep and cattle dip and cattle fly oils.

Diameter, 7 inches. Height, 2 feet. Capacity, 4 gallons. Weight, empty, 8 lbs. Weight, loaded, 39 lbs. Weight, shipping, 13 lbs.

Price, galvanized, with stop cock, \$5.75

Brass, \$7.50

With the Auto-Pop Nozzle, see cut A, \$1.00 extra.

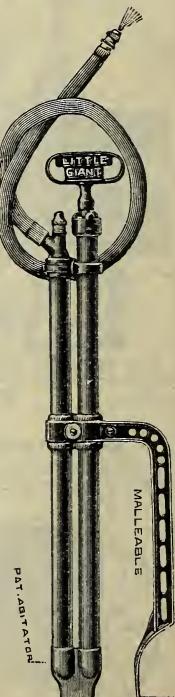


AUTO-SPRAY NO. 1

or testing lime and sulphur and other solutions. Registers from 0 to 35 Baume scale, and 1000 to 1300 specific gravity. A well made, reliable instrument that protects you against low grade sprays. Weight, 1 3/4 lbs. **Price, each, \$1.00.**

SPRAYOMETER SET Consisting of one LI-SUL Sprayometer, one 12-inch plain Glass Cylinder in woolen container, with full instructions. Per Set---Weight 1/2 lb.—**\$1.25.**

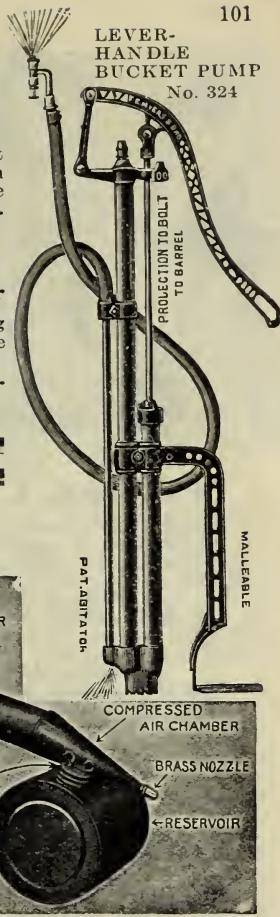
Sprayometer



Spray Pumps and Sprayers

Lever Handle Bucket Pump No. 324

The lever handle and large air chamber make this the most powerful bucket pump and the easiest one to operate. All working parts are solid brass with brass ball valves and patent agitator. Fitted with graduating Vermorel nozzle to throw a fine or coarse spray or a solid stream. Weight, 8 lbs. Price, \$3.75.



Hand Sprayers and Sprinklers

Aspinwall Sprayer

Fig. 30. One of the most convenient and economical hand sprayers for applying liquid lice-killers, sprays, etc. Nothing cheap but the price. Weight, 1 1/4 lbs. Price, 50c.



Aspinwall Powder Sprayer

Fig. 20. Excellent for blowing powder on vines and bushes; good size and works fine. Weight, 2 lbs. Price, \$1.25.



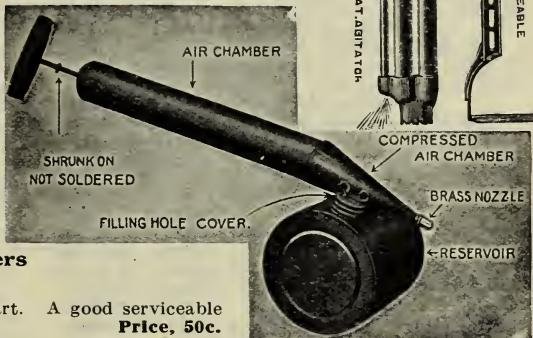
Portland Seed Co.'s Diamond Hand Sprayer

This is the best hand sprayer to date; has a compressed air chamber, which makes the pressure continuous; has brass nozzle adjustable to spray, fine or coarse; brass ball valve; is simple in construction, light and durable; works easy. Wt. 1 1/4 lbs. 75c.

Lightning Sprayer No. 1

Double tube angle discharge, enabling the operator to spray up under the leaves. Best sprayer for small plants and bushes. Weight, 1 lb.

Each, 50c.



Misty Hand Sprayers

Single Action.

Made of heavy tin. Holds about one quart. A good serviceable sprayer for general use. Weight, 1 1/2 lbs. Price, 50c.

"Diamond"

Plant Sprinklers

These little hand sprinklers are used by all florists for spraying pot plants with water or insecticide. They are made of the best quality of rubber, and are durable and lasting. Made in two styles, straight and angle neck. Will spray in any position, and can be quickly filled. (See cut.)

No. 1. 5-oz., Straight neck, weight 4 oz.....	Each, \$0.60.
No. 3. 10-oz., Straight neck, weight 8 oz.....	Each, 1.00.
No. 1. 5-oz., Angle neck, weight 4 oz.....	Each, 0.65.
No. 3. 10-oz., Angle neck, weight 8 oz.....	Each, 1.10.



Pacific Lawn Sprinklers

Properly constructed, iron stand, upper part all brass. Turns with small force. Weight, 3 1/2 lbs. Price, \$1.25.

C. B. G.—Cut page 102

Cheap, but good. Best cheap sprinkler. Weight, 1 1/2 lbs.

PLANT SPRINKLER

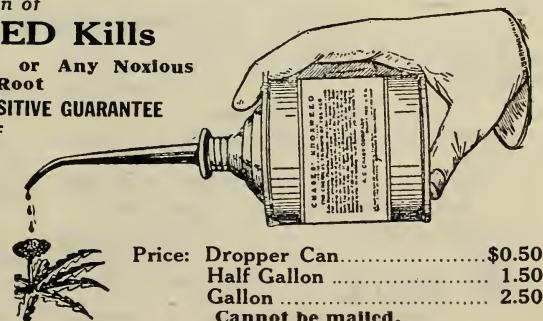
BUSY.
A regular water flitter runs easy. Weight 2 lbs. Price, \$1.00



A Single Application of KNOXWEED Kills

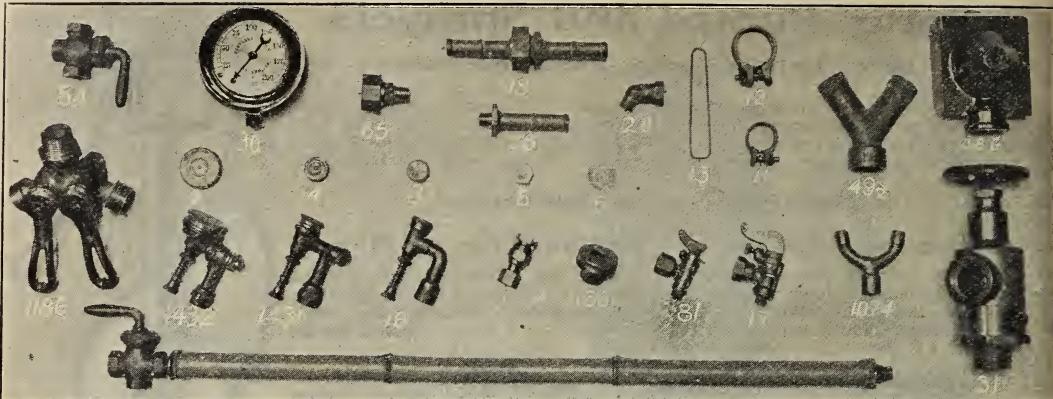
Plantain, Thistle or Any Noxious Weed—Top and Root

SOLD UNDER A POSITIVE GUARANTEE



PACIFIC

BUSY



Nozzles, Connections and Hose Supplies

Fig. 1501. Mistry Jr. Best hop nozzle; throws a perfect spray; of greater capacity and a great improvement over other nozzles; produces a fog in great volume at a light pressure. Weight 6 ozs.

Price, \$1.25; extra disc, Fig. 6, 25c.

Fig. 1431. Mistry Nozzle. The latest thing in spray nozzles. It produces a perfect mist or fog with small pressure. Weight 4 ozs.

Price, \$1.00; extra cap, Fig. 4, 15c.

Fig. 1432. Large Mistry. Same as above, but is larger, and has a swivel adjustment, which allows the spray to be thrown at any desired angle. Weight 8 ozs. Price, \$2.00; extra cap, Fig. 2, 30c.

Fig. 16. Vermorel Nozzle. With degorger, affords a conical discharge. Very popular. Weight 4 ozs.

Price, 75c; extra cap, Fig. 3, 20c.

Two-Discharge Vermorel. Covers twice the surface sprayed by the single nozzle. It is the nozzle for general orchard work. Weight $\frac{1}{2}$ lb.

Price, \$1.75.

Fig. 81. Seneca. Gives a very wide spray; discharge easily graduated. Weight $\frac{1}{2}$ lb.

Price, 75c.

Fig. 1. Bean's Best. Best long-distance nozzle. Weight 2 ozs.

Price, 75c; extra cap, Fig. 5, 20c.

Fig. 17. Bordeaux. Use this nozzle for white-washing.

Price, 75c.

Fig. 51. Cyclone Nozzle. With side discharge. Weight 2 ozs.

Price, 75c.

Fig. 20. Nozzle Ell. Weight 2 ozs. Price, 25c.

Fig. 30. Pressure Gauge. Weight 1 $\frac{1}{2}$ lbs.

Price, \$1.50.

Fig. 31. Relief Valve. Wt. 3 lbs. Price, \$4.00.

Fig. 26. Hose Connection. Weight $\frac{1}{4}$ lb.

Price, 25c.

Fig. 65. Hose Reducer. Wt. 3 ozs. Price, 30c.

Fig. 1186. Double Cut-off. Weight 2 lbs.

Price, \$2.00.

Fig. 49 $\frac{1}{2}$. Brass Y, $-\frac{3}{4}$ inch, for hose coupling. Weight 1 lb.

Price, 75c.

Fig. 1074. Brass Y, $\frac{1}{4}$ -inch, for nozzle only. Weight $\frac{1}{4}$ lb.

Price, 50c.

Figs. 11-12. Brass Yerndon's Bands, $\frac{1}{4}$ or $\frac{3}{4}$ -inch. Postpaid, each, 5c; doz., 50c

Fig. 13. Caldwell Bands. Per doz., postpaid, $\frac{1}{2}$ -inch, 25c; $\frac{3}{4}$ -inch, 30c.

Gem Hose Nozzle. One of the best for yard use. Weight $\frac{1}{2}$ lb.

Price, 40c.

Fig. 25. Bamboo Extension. Has iron pipe inside of bamboo, threaded for nozzles and stopcock. Price, with stopcock (Fig. 54)—

Bamboo	Iron	Bamboo	Iron		
2 to 4 ft....	\$1.40	\$1.00	10 ft.....	\$1.80	\$1.30
6 ft.....	1.50	1.10	12 ft.....	2.00	
8 ft.....	1.60	1.20			

Fig. 54. Stopcock. Weight $\frac{1}{2}$ lb. Price, 50c.

Fig. 18. Hose Coupling. $2\frac{1}{2}$ -inch shank, for heavy pressure spraying.

For $\frac{1}{2}$ -inch hose, price, per pair, 65c postpaid

Hose Couplings, for garden hose, $\frac{1}{2}$ -inch or $\frac{3}{4}$ -inch, complete.

Price, postpaid, 25c.

Hose Washers. $\frac{1}{2}$ -inch, rubber. Doz., 10c.

The "Lenox" Nozzle

For Cold Water Paint and Whitewashing.



Fig. 1495. Made especially for whitewashing and other methods of painting. It has a large opening inside, with rounding corners, to prevent clogging. The spray opening has steel disc and a lower cap, which can be removed for cleaning at any time. This nozzle is superior to any other on the market for this purpose. Wt. 5 ozs.

Price, 75c.

DAIRY THERMOMETERS AND GLASSWARE

Floating Glass Dairy Thermometers, 8 inches, flat scale, easy to read, floats upright, range 150 degrees.

Each, 25c.

LACTOMETER

(Milk Percent scale, New York Board of Health Pattern.)

0 to 120; 2 degrees graduation. Each, 50c.

LACTODENSIMETER (Quevenne)

Specific gravity scale 1015 to 1040, 1 degree graduations.

Each, 50c.

LACTODENSIMETER (Quevenne)

Specific gravity scale 1015 to 1040, 1 degree graduations; with thermometer in top of stem, length 13 inches.

Each, \$2.00.

GLASS JARS.

Plain glass jars with foot and pour-out for use with sprayometers and hygrometers in testing.

10x2 inches Each, 45c.

12x2 inches Each, 50c.

GRADUATED CREAM GAUGE.

Graduated 0 to 30 per cent. $9\frac{1}{2} \times 1\frac{1}{2}$ inches.

Each, 75c.



NOTE All glassware carefully packed for mailing, but we will not be responsible for breakage in transit.

"**Tips for Butter Makers**" is a splendid little book which we will send to you free on request.

The Sharples Cream Separator

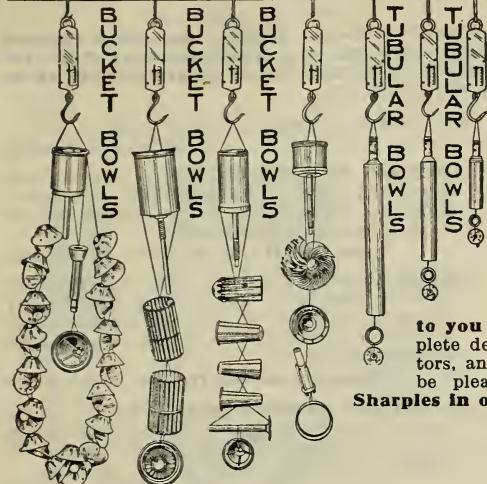
For 32 years the standard. More Sharples Separators are in use today than all others combined.

If you milk a few cows you need a separator. If you milk many cows and do not use a separator, you are losing many times its cost.

The first cost of a Sharples Separator is not great and it quickly pays for itself in the finer separation of butter fat, saving much that is lost by hand skimming; also saves labor and trouble; no pans to set around, skim and care for, you simply pour the milk into the low receiver and a few turns will separate every particle of cream that can be saved.

If there is a single doubt in your mind as to which separator is the best for you to buy, compare the many intricate contrivances that make up the working parts of other separators with the few simple, smooth parts of the matchless "Tubular A."

12½ lbs. 12½ lbs. 8¼ lbs. 10½ lbs. 6¼ lbs. 3½ lbs. 1½ lbs.



See Illustration—compare the three sanitary parts of the Tubular to the multitude of germ and dirt collectors of the others. No other argument is necessary to convince any observing person of the superior merits of the Sharples.

What others attempt by complicated mechanical devices, the Sharples thoroughly and easily accomplishes with twice their skimming force by a process that is simple, powerful, irresistible in the perfection and beauty of its mechanical detail.

If your local dealer does not handle Sharples Separators, we will send the Sharples books

to you on receipt of your address. They contain complete description, tell all about Tubular and Jersey separators, and contain much other interesting matter. We will be pleased to answer all inquiries or demonstrate the Sharples in our store. There are nine sizes.

All prices are F. O. B. Portland, safely packed.

No. 1—Turbine	225 lbs. per hour	\$40.00
No. 2—Turbular	300 lbs. per hour	55.00
No. 3—Tubular	400 lbs. per hour	65.00
No. 4—Tubular	500 lbs. per hour	75.00
No. 6—Tubular	700 lbs. per hour	90.00
No. 9—Tubular	950 lbs. per hour	110.00

JERSEY--An Improved Type of Disc Machine for Those Who Prefer a Low Priced Separator.

If you believe a cheaper separator than a "Tubular" will answer your purpose, do not buy until you have investigated the "Jersey" which skims cleaner, runs easier, is simpler and lasts longer than any other separator—with the single exception of the "Tubular". The "Jersey" has the bottom feed which prevents frothy cream and the single suspended bearing which prevents vibration and loss. The "Jersey" is not as convenient to clean as the "Tubular" but is guaranteed superior to any other separator of its class and is the best value ever offered. No. 5—500 lbs per hour, \$45.00. No. 9—900 lbs. per hour, \$75.00.

F. O. B. Portland

Babcock Tester--Model 8

For Testing Milk
and Its Products.

The most accurate and best built tester. Case is one solid piece, weighing about 4 pounds. Crank and shaft a single solid piece of steel. Worm spindle and gear solid steel and iron mesh full width.

Buckets solid brass. Gear worm runs in oil. Model 8 Babcock Testers are guaranteed perfect in workmanship and material, all are equipped with full set of glassware, bottle of acid and brush. Shipping weight, 15 lbs. Accurate skim milk bottles at 60c each; \$6.00 dozen; postage 10c for single bottle.

Prices Babcock Testers.

No. 4—2 bottles, milk only.....	\$4.25	No. 6—4 bottles, milk only.....	\$5.25
No. 5—2 bottles, milk and cream.....	4.75	No. 7—4 bottles, milk and cream.....	5.75

IDEAL EAR BUTTONS

Pure Aluminum Hardened

Medium size, suits all animals, clinches tight, can not come out; double strength. Name and address on top side; number on bottom.

Easily attached with special punch and pliers.

PRICES

25.....	\$1.25	500.....	\$15.50
50.....	1.90	1000.....	28.00
100.....	3.50		

Punch and Pliers

Add 10c per 100 if sent by mail, and 10c for Punch and Pliers.

Not more than 19 letters can be used for name and address.

Markers For Cattle, Hogs and Sheep.

Your name on one side, numbers on the other. Not more than eleven letters can be used on the hog and sheep size; 15 letters on cattle size.

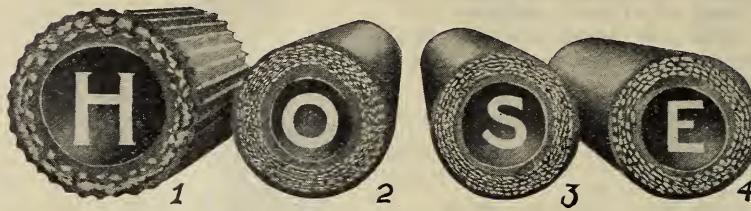
PRICES

Two sizes; Sheep and Hog	Cattle
100 with name and number.....	\$1.65 \$2.15
50 with name and number.....	1.15 1.40
25 with name and number.....	.75 .85
100 with name only, or number only	1.25 1.65
50 with name only, or number only	.85 1.15
25 with name only, or number only	.60 .75
100 Cattle size, 2 ½ lbs. per 100; 100 Sheep size, 1 lb. per 100.	

Oval Ear Punches, Cattle size, weight, 1 ¼ lb. each, \$1.65; Sheep and Hog size, \$1.25. Postage, 10c each.



Florists' and Nurserymen's Supplies



- No. 1—Electric
- No. 2—Monarch
- No. 3—Pomona
- No. 4—Hood

For Spray Pumps and Gardens.

THIS season we are offering our customers a very complete and reliable line of spray and garden hose. We buy in very large quantities, direct from the manufacturers, which places us in a position to quote the following very low prices. Most of the brands we offer are manufactured especially for us, and can be obtained nowhere else.

NOTE.—All our hose, excepting spray, is furnished in 50-foot lengths, and comes coupled ready for use. We will cut any of these hose in 25-foot lengths at an additional cost of 25c. for couplings. We will cut $\frac{1}{2}$ -inch Pomona and Monarch Spray Hose in any length desired, at an extra cost of 65c. for spray couplings in less than 50-foot lengths.

MONARCH SPRAY HOSE. The Monarch, a new spray hose, is even a better grade than our well-known "Pomona." It is absolutely the best hose we can buy; the rubber is of exceptionally good quality and is very heavy; and we do not hesitate to recommend it to orchardmen, who must have a very high-grade and strong spray hose.

MONARCH SPECIAL SPRAY. $\frac{1}{2}$ -inch only.
Price, per ft., 18c.

POMONA SPRAY HOSE. Our well-known Pomona is the best hose which can be bought at a moderate price. It has stood the test of time and hard usage, and has always proved good. 5-ply.
Price, $\frac{1}{2}$ -in., per ft., 13 $\frac{1}{2}$ c; $\frac{3}{4}$ -in., per ft., 15c.
SUCTION HOSE. This is an excellent grade of suction hose, and is what we furnish with our regular pump outfit. Price:
per ft., $\frac{3}{4}$ -in., 27 $\frac{1}{2}$ c; 1-in., 30c; 1 $\frac{1}{4}$ -in., 35c.

AJAX SPRAY HOSE— $\frac{1}{2}$ -inch only.

Price, per ft., 10c.

ELECTRIC GARDEN HOSE. A new process, corrugated rubber hose, that will not kink or break. Especially recommended for florists and gardeners who use hose continuously.

Price, per ft., $\frac{1}{2}$ -in., 21c; $\frac{3}{4}$ -in., 25c.

"HOOD" GARDEN HOSE. This is an excellent grade of garden hose. It is made with four heavy plies of canvas, and with good, thick inside tubing. We have no hesitancy in recommending this for ordinary garden use.

Price, $\frac{1}{2}$ -in., per ft., 10c; $\frac{3}{4}$ -in., 12 $\frac{1}{2}$ c

ST. HELENS GARDEN HOSE. This is a good grade of garden hose of moderate price, and where a hose of medium price is wanted it will give excellent satisfaction.

Price, $\frac{1}{2}$ -in., per ft., 9c; $\frac{3}{4}$ -in., 11c.

FLORISTS' SUPPLIES. We carry a complete line of high grade up-to-date supplies. Write or wire. You can depend upon us for prompt service at right prices. Descriptive price list on request. Designs and cut flowers furnished on short notice.

Mastica

For Glazing New or Old Greenhouses.

The use of "Mastica" avoids the necessity of repeatedly reglazing the houses, saving much time and expense. With "Mastica" you can bed in, or use outside with machine. Broken glass can be easily removed and replaced by new without breaking of other glass, which usually occurs with hard putty. One gallon will cover about 290 running feet (one side).

Price, per gallon, \$1.50.

Mastica Glazing Machine

To fill the machine, remove the plunger and pour "Mastica" into top of cylinder; replace the plunger and with a gentle pressure of the handle the "Mastica" is forced through the opening at the heel, and is smoothed into perfect condition by the foot passing over it. (See cut.)

Price, \$1.50.

Putty Bulbs

Very convenient for applying liquid putty in glazing greenhouses. (See cut.) Price \$1.00.

Points

Peerless. Best point made. No raising up when driven—no rights, no lefts, no sliding, no trouble to apply; cheap, indestructible. Once used always used. (See cut) 1000 in box. Price 75c.



Strong, Healthy Trees and Plants

We have them in quantity
Our tree catalog tells all.

KNIVES

Will send any of the following knives postpaid, at these prices. See numbers on cut.

Budding Knives

Prices Postpaid.

No. 8. Ebony handle, stationary ivory bark opener. **Price, \$1.00.**

No. 8 1/2. Same as above, only size larger. **Price, \$1.25.**

No. 10. Ivory handle very light and fine. **Price, \$1.00.**

No. 10 1/2. Same as above, only size larger. **Price, \$1.25.**

No. 12. Brown handle; very light and fine. **Price, 85c.**

No. 13. Plain wood handle, stationary blade. **Price, 25c.**

No. 5. Budding and pruning knife combined. **Price, \$1.00.**

Grafting Knives

No. 6. Plain wood handle, stationary blade. **Price, 35c.**

No. 7. Plain wood handle, stationary blade; smaller. **Price, 25c.**

No. 9. Special Henckels Grafting Knife—has extra heavy brass lining, brass rivets, blade set deep in handle, giving great strength. **Price Ea. \$1.00.**



GRASS SHEARS.

Fine for trimming borders and edges, good make; 6-inch blade. (See cut, Fig 28.) Weight $\frac{3}{4}$ lb.

Each, 60c.

GRASS SHEARS, "Keen Kutter" Best made **Price, \$1.00.**

Grape Shears

Holds fruit or plant until released.

Postpaid, \$1.00.

Miscellaneous Florists' and Nurserymen's Supplies

Plant Stakes

Round cedar, painted green, white tops.
3 ft., 75c.; doz.; 3 1/2 ft., 80c.; 4 ft., 90c.; 5 ft., \$1.30.
6 ft., \$1.75.

Bamboo. **4 ft., 20. doz.; 5 ft., 25c.; 6 ft., 30c.**

Pencils

Indelible, nickel tip, for marking labels. **Each 15c.**

Oregon Moss

We have this gathered, dried and put up in bales of about 100 lbs. each for florists' and nurserymen's use. Write for price by ton or carload.

Per lb., 5c.; 100 lbs., \$3.00.

Tin Foil

Florist. Regular stock. **Per lb., 15c.**

Wire Designs

Every description. List on request.

Wire Hanging Baskets

8 in., 20c.; 10 in., 25c.; 12 in., 30c.; 14 in., 50c.

FLORISTS

We issue a special list of Florist Supplies of every kind. Our stocks are the largest in the West. Let us figure on your orders.

Pruning Knives

Note.—See numbers in descriptions.

No. 2. Plain wood handle, stationary blade. **Price, 50c.**

No. 3. Large horn handle, very strong. **Price, \$1.50.**

No. 4. Polished wood handle. **Price, 80c.**

Grafting Wax

1/4-lb., 10c.; 1/2-lb., 20c.; 1lb., 35c.

Long Handle Tree Pruners

Indispensable in Pruning Tall Trees. (See cut.)
6 feet, 75c.; 8 feet, 90c.; 10 feet, \$1.00; 12 feet, \$1.15.

Pruning Saws

Add 10c. Each for Postage

Crescent, 12-inch blade	65c.
Crescent, 14-inch blade	75c.
Straight blade, 16-inch	60c.
Straight blade, 18-inch	65c.
Straight blade, 20-inch	70c.

Flower Shears

Nickle-plated: with springs: cuts and holds the flower from falling until opened again. **Postpaid, \$1.25.**

Grass Hooks or Sickles

These are the latest style and shape.

Clark. First-class; detachable blade. Weight $\frac{3}{4}$ lb. **Price, 45c.**

Village Blacksmith. No. 2. Hand forged. Weight $\frac{1}{2}$ lb. **Price, 50c.**

Village Blacksmith. No. 3. Weight $\frac{1}{2}$ lb. **60c.**

Raffia

For tying plants and buds. **Lb., 25c.**
For colored Raffia, see page 47

Wooden Labels

Tree Labels

Painted iron wire. **Per 100, 15c.; per 1000, \$1.00.**
Unpainted iron wire. **Per 100, 15c.; per 1000, 85c.**

Painted copper wire. **Per 100, 20c.; per 1000, \$1.10.**

Unpainted copper wire. **Per 100, 20c.; per 1000, \$1.00.**

Per 100, 20c.; per 1000, \$1.00.

Pot Labels

4-inch. Plain, per 100, 15c.; 1000, 75c.; painted, 1000, 85c.

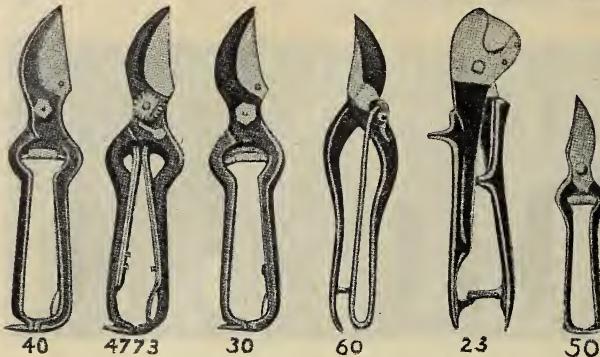
5-inch. Plain, per 100, 20c.; 1000, 80c.; painted, 1000, \$1.05.

6-inch. Plain, per 100, 25c.; 1000, \$1.25.; painted, 1000, \$1.40.

8-inch. Plain, per 100, 30c.; 1000, \$1.50.; painted, 1000, \$1.75.

BULBS

We import annually large quantities of Flowering Bulbs and Roots for Florists' and Gardeners' use. Catalog and prices on request.



Pruning Tools Knives, Weeders, Etc.

BOOKS on Pruning

The latest works of the best authorities

SEE PAGES 46-47

NOTE.—Compare numbers on cut 'n' those in descriptions.

No. 4773. 9-inch; full polish, with double brass springs; best American make. Weight 1 lb. Price, \$1.50.

No. 40 9-inch; bright finished, polished blade, spiral steel spring; made for hard service. Weight 13 ozs. Price, \$1.00.

No. 41. Same as No. 40, except with ratchet nut. Weight 14 ozs. Price, \$1.25.

No. 30. 7-inch; German make; black finish; polished blade; very good. Weight 14 ozs. Price, 75c.

No. 31. Same as No. 30, only 9-inch ratchet nut; an American make. Wt. 14 ozs. Price, \$1.00. Thinning Shears. Weight, 6 ozs. Price, 35c.

No. 50, 5½-inch, nickel-plated; small, but of best material; fine for ladies. Weight 4 ozs. Price, \$1.00.

No. 51. Same as No. 50, except that it is 6½ inches long. Weight 5 ozs. Price, \$1.25.

No. 23. Levin Pruner, 7-in.; cuts clean; cuts ½ inch. Weight 10 ozs. Postpaid, 60c.

No. 60. Perfection, 8½-inch; imported French shear; powerful, strong; cuts easily. Weight 13 ozs. Price, \$3.00.

No. 61. 7½ inch; same as above. Weight 9 ozs. Price, \$2.75.

No. 62. 6½-inch; same as 60. Weight 6 ozs. Price, \$2.50.

Bastian
Tree Pruner

Bastian Prun-
ing Shears

The New Bastian Pruners Makes a Clean Sharp Cut

The Powerful Lever on the Bastian Pruner is a wonderful improvement over other methods of construction, enabling you to work easily and rapidly doing the same work in half the time and with half the labor that would be required with old style Pruners.

The Blades are of finest damascus steel, are very strong and hold their cutting edge.

Simple in construction, light, strong and durable. We recommend the Bastian to every fruit grower.

Ea. 5 to 7 ft	\$1.25
" 8 "	1.50
" 12 "	1.75

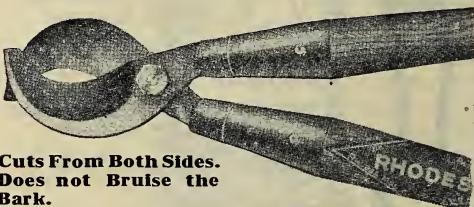
Bastian Pruning Shears

Built on the same principle as the pruner, intended for light work where a handshear would be used. You can round up young trees or trim bushes, cut suckers, etc., standing on the ground. Makes quick work, no straining or stooping.

Price 5 to 7 feet \$2.25
8 " 11 " 2.50
12 " 2.75

Extra Blades, \$1.50 per pair.

Rhodes Double Cut Pruner



Cuts From Both Sides.
Does not Bruise the
Bark.

The overlapping incurved points prevent the double edges from cutting each other. This is the most powerful and cleanest cutting shear made. Built for hard service. Notice the heavy ferrules and rivet through the shank. They can't work loose. Length, 30 inches. Weight, 3½ lbs. Price, \$2.50.

Branch Shears

Fig. 126. This has no equal in its class: is forged from high-grade tool steel; finely tempered, solid wrought steel ferrules. Patent lock nut. Cannot work loose and ruin shears. 26-inch handle. Weight, 3 lbs. Price, \$2.00.

Fig. 35. Standard pattern; Satisfactory for light work, a good value.

26-inch handle, weight 2½ lbs., 75c; 41-inch handle, weight 3 lbs., 90c.

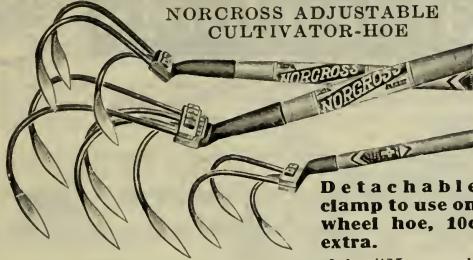
Five of the Best Hand Weeders

Fig. 21. Lang's.	Weight, 6 ozs.	25c.
Fig. 22. Combination.	Weight, 6 ozs.	25c.
Fig. 23. Hazeltine's.	Weight, 6 ozs.	30c.
Fig. 24. Excelsior.	Weight, 6 ozs.	20c.
Fig. 25. Noyes'.	Weight, 4 ozs.	25c.

SCALECIDE is an unfailing remedy for all scale and fungus. Will not injure your pump or equipment, easy to apply, spreads and penetrates

WEEDERS, ETC.—Continued

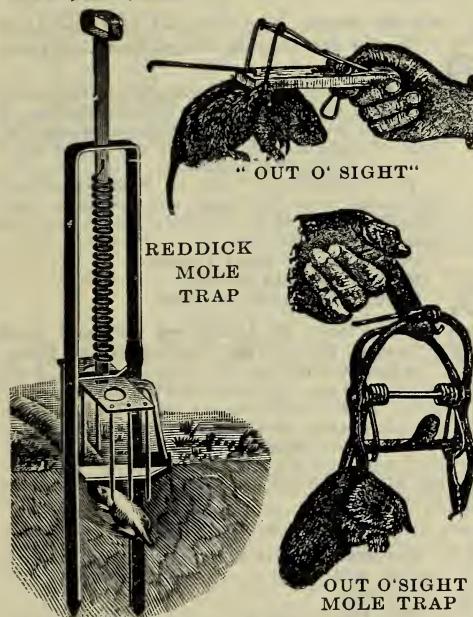
NORCROSS ADJUSTABLE CULTIVATOR-HOE



Detachable clamp to use on wheel hoe, 10c extra.

Like a human hand the fingers of the "Norcross" work closely around the plants without injury. Keeps down weeds, saves moisture, leaves the ground level.

PRICES: 5 prong for regular garden work; 4-ft. weight 3 lbs., \$1.00; 3 prong, lighter in weight, for narrow rows and close work, 4-ft., weight 2 lbs., 75c; 3 prong "midget" 9-inch handle for flowers or close hand work, weight 12 ozs., each, 35c.



Reddick Mole Trap

No Mole Can Pass Under It and Live.

These traps are strong and durable and worth the price to anyone troubled by moles. Full directions with each trap. (See cut.) Weight 2 1/2 lbs.

Price, 75c

Whitney Rodent Torch

Whitney Rodent Torch Exploded in the runway the poisonous gases penetrate all parts and suffocate the animal—especially effective against moles—express or freight (cannot be mailed); pkg. of 25, weight 1/2 lb.

Price per pkg., 60c.

GOPHER TRAP—California Box. Similar to "Out O' Sight" except this trap has sides boxed up, this leads the gopher to the correct position for prompt execution: the most popular trap—never fails. Weight 1 lb.

Price each, 25c.

"GOPHER-GO"**Machine Poisoned Raisins and Grain.**

Sure death to Gophers, Squirrels, Prairie Dogs, Rabbits, Rats, Mice and all Rodents. An attractive bait, thoroughly poisoned, the only one that "gets them."

Price, put up in tins, 25c, weight 11 ozs.; 50c, weight 27 ozs.; \$1.00, weight 5 1/4 lbs.; \$2.00, weight 10 lbs.



No. 212 No. 211 No. 214 No. 313 No. 217 Fig. 26

Garden Trowels

See descriptions of numbers on cuts.

Don't class these tools with the cheap stock offered by the department stores. (See cut.)

No. 211. Six inch; blade and shank of one piece of forged steel. The best tool of its kind in the market. Weight 1/4 lb.

50c.

No. 313. Six inch; good steel trowel, with malleable iron shank, firmly riveted. Weight 1/2 lb. **15c.**

No. 214. Six inch; steel trowel, stronger and better finished than the above. Weight 3/4 lb. **25c.**

No. 212. Six inch; solid steel; a first-class trowel. Weight 3/4 lb.

35c.

No. 217. 6 in. steel transplanting trowel. **1/2 lb. 20c.**

No. 217. Eight inch; steel transplanting trowel. Weight 1/2 lb.

25c.

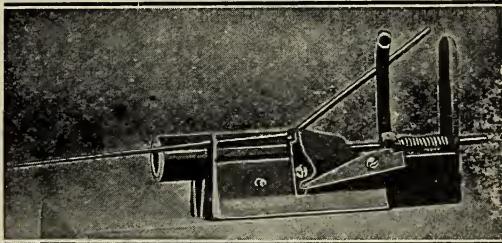
No. 217A. Transplanting hoe trowel, used by gardeners in setting out plants. Wt. 1 lb. **50c.**

No. 216. Ladies' flower trowel. Wt. 1/2 lb. **10c.**

No. 216A. Special Bulb Trowel. Wt. 1 lb. **75c.**

Dandelion Pullers

Fig. 26. Vaughn's (see cut). A most convenient tool for digging those troublesome weeds. Wt. 1 lb. **50c**

**Portland Seed Co.'s Gopher Gun**

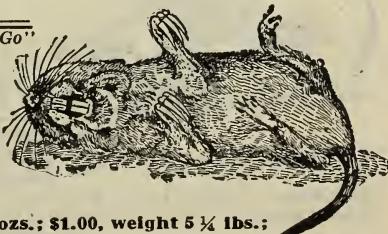
Far superior to the old styles; breech loader; place in the runway; perfectly safe. Made for 16-gauge shells; discharged by a push and can be set for hawks, coyotes and coons. Weight 3 1/4 lbs.

Price, \$1.75.

Out O' Sight Traps

Out O'Sight Rat Trap. **Postpaid, 25c.**
Out O'Sight Mouse Trap. **Postpaid, 10c.**
Out O'Sight Mole Trap. Weight 2 lbs. **75c.**

"Gopher-Go"
Never
Fails.
Try it.



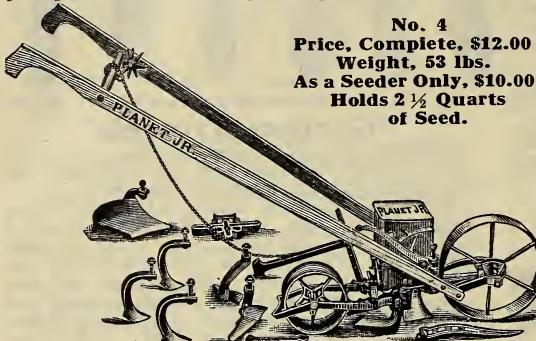
Planet Jr. Garden Tools

FOR 40 years Planet Jr. Garden Tools have stood the test of world-wide usage, and are recognized in every known country as the highest type of garden implement. In Europe where labor is cheapest Planet Jrs. are in constant use. How, then, can you afford to be without them where labor is both high and scarce?

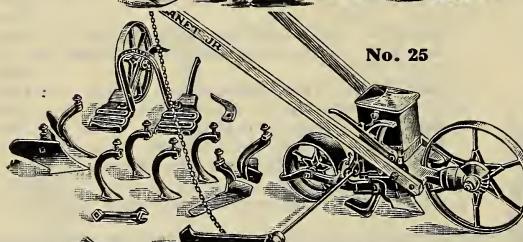
We cannot tell you all about Planet Jrs. in this catalog, but will send you the beautiful 64-page Planet Jr. book on request.

Many improvements are added for 1913, including steel frames for wheel hoes instead of the malleable or cast ones.

Being general selling agents for Planet Jr. implements our stocks are large and orders will have prompt attention. State your requirements. We will advise the correct tool.



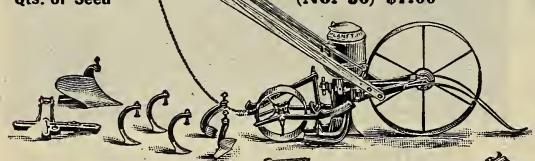
No. 4
Price, Complete, \$12.00
Weight, 53 lbs.
As a Seeder Only, \$10.00
Holds 2 1/2 Quarts
of Seed.



No. 25

No. 6
Price, Complete, \$14.50
Weight, packed, 64 lbs.
As a Seeder Only, \$12.00
As a Wheel Hoe Only
(No. 36) \$7.00

Holds over 2
Qts. of Seed



No. 3. Price, \$11.50
15-inch Steel Driving Wheel
Holds 3 Quarts of Seed
Weight, packed, 47 lbs.

A favorite among onion
growers, market gardeners
and seedsmen.



Attachments for

Peat Land Hoes. Weight 2 1/2 lbs per pair.

Per pair, \$2.00

Disc Hoes. Weight 5 1/2 lbs. per pair. \$2.80.

6-inch Hoes, complete. Weight 2 1/2 lbs. per pair

Per pair, \$1.10.

No. 4 Planet Jr. Combined Hill and Drill Seeder, Wheel Hoe, Cultivator and Plow,

This tool combines in a single convenient implement a capital hill-dropping seeder, a continuous row-seeder, an admirable single wheel hoe, an excellent furrower, a capital wheel cultivator and a rapid and efficient wheel garden plow.

A set of three rakes supplied when specially ordered.

Price, extra, \$1.50.

No. 25 Planet Jr. Combined Hill and Drill Seeder and Double Wheel Hoe, Cultivator and Plow.

This new combined machine is intended for gardeners who have a large enough acreage in crops for a Double Wheel Hoe to be used to good advantage, and yet prefer not to buy seeders and wheel hoes separately.

The change from Drill to Wheel Hoe and back again is quickly made, and the entire combination is one we can heartily recommend and guarantee satisfactory.

Price, \$14.50, Steel Frame.

Weight, packed, 59 lbs.

Holds 2 1/2 Quarts of Seed.

No. 6 Planet Jr. Combined Hill and Drill Seeder, Wheel Hoe, Cultivator and Plow.

What it Will Do.—It drops all garden seeds in hills and sows in drills, with the greatest regularity, in a narrow line, to any exact depth required, covers, rolls down and marks the next row, all at one passage. As a wheel hoe, it hoes, cultivates and plows all garden crops, completing a row at every passage, up to 16 inches in width.

No. 3 Planet Jr. Hill and Drill Seeder.

The special force feed is admirable, working equally well whether sowing with an ounce or a full hopper.

The hill dropping is simple and reliable; making hills either 4, 6, 8, 12 or 24 inches apart.

Changes of distance between hills may be made in less than a minute, by substituting one gauge wheel for another.

No. 5 Planet Jr. Hill and Drill Seeder.

16 1/2 Inch steel wheel. Sheet steel hopper holding 5 quarts. Built on the same lines as No. 3 Drill, only larger.

Price, \$13.50. Weight, packed, 52 lbs

No. 2 Planet Jr. Drill Seeder.

It is similar to **No. 1 Planet, Jr. Combined Drill**, but larger, holding twice as much seed, and having higher wheels and larger roller. Has no cultivating attachment.

Price, \$8.25. Holds 3 Quarts.

Weight packed, 37 lbs.

Wheel Hoes

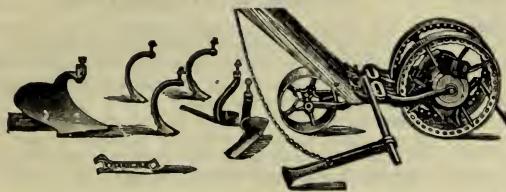
4 1/2-inch Hoes, complete. Weight 2 lbs per pair. Per pair, \$1.00

3 Prong Cultivator Teeth. Weight 2 1/2 lbs. per pair. Per pair, \$1.60.

8-inch Onion Harvester. Weight 1 1/4 lbs. \$1.25.

Planet Jr. Garden Tools

No. 1 Planet Jr. Combined Drill Seeder, Wheel Hoe, Cultivator and Plow.



Price, with Tools as shown, \$10.50. Holds 3 Pints of Seed. Weight, packed, 44 lbs.

The **sowing cylinder** is a drum of spring brass set between the driving wheels, with a sliding brass band and cam. In drum and band are corresponding diamond shaped discharge openings, quickly adjusted for any kind of seed. Inside the drum, shields cover the openings, and insure regular sowing with a full hopper or a thimbleful.

A pair of 5 tooth rakes supplied when specially ordered.

Price, extra, \$1.50

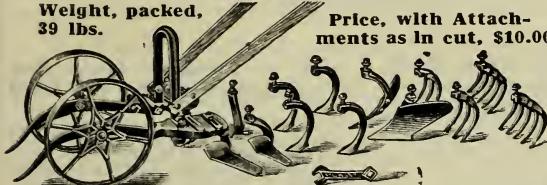
PLANET JR. WHEEL HOES

Double Wheel Hoes

No. 11 Planet Jr. Double Wheel Hoe, Cultivator, Plow and rake.

Weight, packed, 39 lbs.

Price, with Attachments as in cut, \$10.00



No. 12 Double Wheel Hoe, Cultivator and Plow.

This tool is identical with No. 11 Wheel Hoe, except that it has one pair plows, one pair hoes and two pair cultivator teeth only, and is sold at a correspondingly less price.

Price, \$7.85. Weight, 34 lbs.

No. 13 Double Wheel Hoe

This tool is the No. 11, with 6-inch hoes, only, these being the tools that are most generally useful. Any or all of the other tools shown with No. 11 may be added at any time.

Price, \$5.50. Weight, 29 lbs.

No. 14 Planet Jr. Double Wheel Disc Hoe, Cultivator and Plow

This new tool will give excellent satisfaction; is especially pleasing to all who work peat lands. There are three oil tempered discs on each side. The frame is **steel**.

The set of prong cultivator teeth are constructed on entirely new lines, and will be found invaluable in general cultivation.

The plows are the regular Planet Jr. model and are continually valuable for furrowing, covering and plowing.

No. 14. Price, with Attachments, as in cut, \$9.00.

Steel Frame.

Weight, 38 lbs.



No. 38 Planet Jr. Single Wheel Disc Hoe, Cultivator and Plow

This combination occupies the same position among Single Wheel Hoes as that taken by No. 14 Planet Jr. Double Wheel Disc Hoe among Doubles.

Price, complete, \$7.85. Weight, packed, 28 lbs.

Iron King Seed Drill—For Onion Growers

The Iron King Seed Drill is acknowledged by the majority of the large onion growers of Oregon and Washington to be the most practical of drills for sowing onion seed. It is a well made durable and easy running machine, accurate and reliable, and with careful use will last a lifetime. It will save the price of the machine in sowing a few acres. If you are growing onions you cannot afford to be without one. The **Iron King** can also be set to sow anything from turnips to peas.

Price, \$9.25

Single Wheel Hoes

The handles are **adjustable in height**. The frame is **steel**, convenient and strong with quick change device by which to exchange the tools without removing the nuts.

Nos. 16, 17, 17½ and 18 wheels, frames and handles are alike, but the attachments sold with each vary.

The **hoes** are the most valuable of all the wheel hoe attachments; are oil tempered and polished. Use the 4-inch for 6, 10 or 12-inch rows; the 6-inch, for rows 12 inches and upwards.

The **plows** are invaluable; use them with points together for opening furrows for manure, seed, etc.; then exchange sides for covering; use them also for plowing away from or toward the crop, both sides at once.

The **cultivating teeth** for deep or shallow work, and for marking out.

Leaf lifters save time and enable fine work to be done close to the row without additional labor, when plants are large or leaves are flat on the ground.

No. 16 Planet Jr. Single Wheel Hoe, Cultivator, Rake and Plow

**Price, \$6.50
Steel Frame,
Weight, 25 lbs.**



No. 17 Planet Jr. Single Wheel Hoe.

You can do more and better hoeing with it in one day than you can do in three days with a hand hoe. The No. 17 has a pair of 6-inch hoes, a plow and a set of cultivator teeth, an outfit sufficient for most garden work.

Price, \$5.75. Weight, 23 lbs.

No. 17½ Planet Jr. Single Wheel Hoe.

This tool is identical with No. 16, except in equipment. The pair of 6-inch hoes, three cultivator teeth and leaf lifter which go with it, are all the finest of their kind.

Price, \$5.25. Weight, 21 lbs.

No. 18 Single Wheel Hoe.

This tool has one pair of 6-inch hoes only—the tools that are most constantly useful throughout the season. Other tools can be added as needed. **Price, \$4.25. Weight, 20 lbs.**

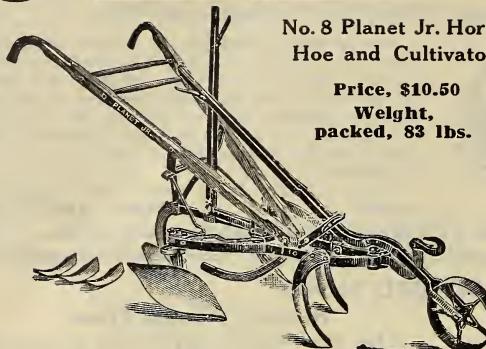
Planet Jr. Garden Tools



No. 8 Planet Jr. Horse Hoe and Cultivator

Price, \$10.50

Weight, packed, 83 lbs.

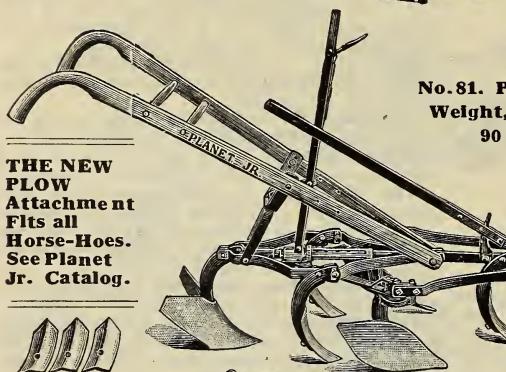


THE NEW PLOW Attachment all Flts all Horse-Hoes. See Planet Jr. Catalog.



No. 81. Price, \$11.50

Weight, packed, 90 lbs.

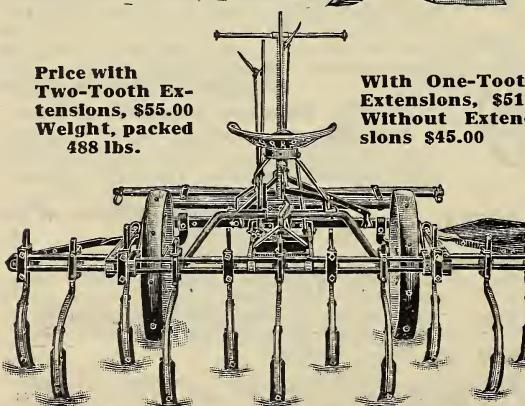


12-Tooth Harrow Complete, \$10.50 Weight, packed, 73 lbs. Without Pulverizer, \$8.60

Price, plain, \$7.30



Price with Two-Tooth Extensions, \$55.00 Weight, packed 488 lbs.



With One-Tooth Extensions, \$51.50 Without Extensions \$45.00

Planet Jr. Horse-Hoes

No other cultivating machine is so widely known as the Planet Jr. Combined Horse Hoe and Cultivator, for it is in use throughout the civilized world. It is so strongly built as to withstand incredible strain, yet it is light and easy to handle. It opens and closes furrows, hoes right up to the plants without danger of injuring, throws dirt to or from the row and throws back from center again.

No. 9 Planet Jr. Horse Hoe and Cultivator

Price, \$8.75. Weight, packed, 70 lbs.

This admirable tool has a plain wheel instead of lever wheel. It has the high frame, patented hollow steel standard, patent lever Star wheel, patent lever expander, and hollow steel wheel arms.

No. 81 Planet Jr. Horse Hoe, Cultivator and Hiller Combined

This is the latest and best tool of the kind. Has six 3-inch cultivator teeth, two 6-inch side plows and a 12-inch furrowing tooth, making an admirable equipment for all widths of cultivation and for hillling crops up to four feet apart.

It has a cultivator tooth central in front, which increases the steadiness of the tool.

Planet Jr. Twelve-Tooth Harrow, Cultivator and Pulverizer

With the Twelve-Tooth Harrow you go as deep or shallow as you like, come up close to row without injuring plants, cut out all the weeds, stir the soil and mellow and fine it as with a garden rake. You widen and narrow as you please between 12 and 32 inches. It's a special favorite with strawberry growers, market gardener and truckers.

A strawberry runner cutter consisting of a 10-inch flat steel disc mounted on an outrigger.

Price, extra, \$2.30.

No. 41 Planet Jr. Orchard and Universal Cultivator

The steel wheels are low and entirely enclosed by the frame. The tongue is steel.

The frame is high carbon steel, compact in form, well braced, heavy and strong.

Without the extensions, it cuts 4 feet in width, having seven stiff steel standards, carrying $2\frac{1}{4} \times 10$ -inch teeth.

With the extensions, it cuts 6 feet 6 inches, carrying eleven teeth, and the frame can be changed to cut any width from $6\frac{1}{2}$ down to 4 feet.

Disc Harrow Attachment. We sell as an attachment to No. 41 a set of five pairs of discs, making a capital disc harrow.

The New "PLANET JR." Catalogue is the handsomest, best, and most instructive book ever issued on a similar subject. Full of little points that bring profit. Full of true and handsome illustrations. We mail it free to any address on application.

BEE SUPPLIES

We are Western agents for the A. I. Root Co., the largest manufacturers of Bee Supplies in the world, and whose products are the recognized standard of excellence among bee-keepers. We carry immense stocks and can equip you with everything necessary for the profitable and successful handling of Bees.

If there is anything you need or any special information you require, write us. We have experts in our employ whose knowledge and experience are at your service. Our complete Bee supply catalogue will be mailed you on request.

DOVETAILED HIVES AND FIXTURES.

These are now recognized as superior to all other styles in convenience, economy and durability. We offer four grades, Root's P. S. Co.'s Pine, P. S. Co.'s Cedar, and P. S. Co.'s Western Pine.

New and Improved Appliances of the A. I. Root Co.

DANZENBAKER HIVES.—These hives take the same Cover, Bottom Board and Super as the ten-frame dovetailed hive, but the Brood Chamber is more shallow, taking ten closed end Brood Frames $7\frac{1}{2}$ inches deep and 17 inches long; each is supported by a pivot in the center of the end bars, a great improvement, as the frames can be reversed and filled out to the ends; it also prevents bees mashing in handling.

The Section Holder has the same kind of Pivot Support, and a fence separator is used. The Section is a plain $4\times 5 \times 1\frac{1}{2}$, a size and shape that is very pleasing to the eye, and therefore a good seller. The arrangement in the super is such as to get perfect results in filling out the sections, and in no other hive are they so uniformly and attractively finished. While the Danz. Hive is more shallow than the standard Langstroth it has exactly the same Cubic Capacity as the eight-frame Dovetailed Hive, but by having the shallower brood chamber the two inches of honey usually put above the brood in the standard Langstroth frame is carried up into the broader Danz. Super.

For prices and combinations of Danzenbaker Hives see page 112.

THE METAL SPACED FRAME is now offered as being specially adapted to localities where there is much trouble with propolis. They are very accurate, easy to handle, and protect the top bars from splitting at the ends.

WIRE EXCLUDERS.—Another recent improvement of great value is the use of wire in place of perforated zinc for honey boards, excluders, etc. The bee ways are made of No. 14 galvanized wire and are more perfect than is possible with stamped metal.

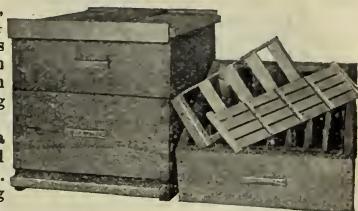
EXTRACTORS.—Ball Bearings and Slip Gear devices are furnished on all of our extractors, including the Novice and Cowan Reversible. The slip gear attachment enables the operator to disengage the crank and gear after speeding up, and allows the frames to spin without the drag of the gear. They will run this way for some time, enabling anyone working alone to proceed with uncapping.

IMPROVED SHIPPING CASES have corrugated paper instead of the cleats, making a safer, neater non-drip package.

Root's Hive Combinations and How to Understand Them

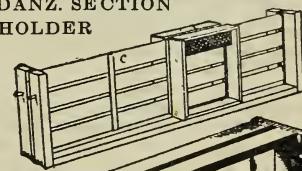
To accommodate various localities and beekeepers of different preferences, we have a large number of different combinations, and each combination is indicated by a series of letters and figures. A glance at the following table showing the meaning of each letter or figure in alphabetical and numerical order will make all plain

- A. Danzenbaker bottom.
- E. Excelsior cover.
- G. The gable cover.
- I. Super for Ideal plain sections, $3\frac{1}{2} \times 5$.
- M. Super 4×5 plain sections for Danz. hive.
- P. Super equipped for plain $4\frac{1}{4}$ sections.
- S. Super for $4\frac{1}{4}$ beeway sections.
- 2. Super with section holders, separators or fences, but no sections or foundation.
- 4. Super with section holders, separators or fences, sections and foundation starters.
- 5. Hive body or brood chamber, with frames and division board but no starters.
- 6. Hive body or brood chamber with frames, division board, and foundation starters.

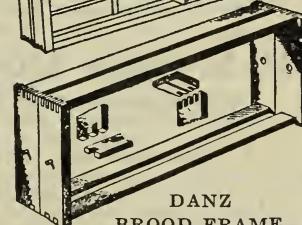


DANZENBAKER HIVE

DANZ. SECTION
HOLDER



DANZ
BROOD FRAME



8. Indicates hive with 8 brood frames.

10. Indicates hive with 10 brood frames.

When the figures are doubled, it indicates that two of the articles are called for. For instance, 2-2P means two supers with plain section holders and fences

If you desire a Danz. bottom-board, Excelsior cover, 8-frame dovetailed hive with frames, foundation and super with section holders, $4\frac{1}{4}$ plain sections, fences and foundations, the number would stand thus: AE64P-8.

If you wish two supers, in place of the one you would add another figure 4, and the whole would read for 8-frame hive, AE-644P-8; or if you wanted this same combination without foundation or sections, the designation would be AE522P-8.

Dovetailed Hives and Fixtures—Continued**Price List of Root's Dovetailed Pine Hives—Different Combinations**

HIVES		Each Nailed	K. D. in Flat 5	K. D. in Flat 10	Wgt. of 10
No. 1 (A-E or A-G, 6-4, S or P) 8 frame body and 1 super, all complete with starters.....		\$2.60	\$11.50	\$22.50	280
No. 1 (A-E or A-G, 6-4, S or P) 10 frame body and 1 super, all complete with starters.....		2.80	12.50	24.50	320
No. 2 (A-E or A-G, 5-2, S or P) 8 frame body and 1 super, all complete less sections and starters.....		2.30	10.00	19.50	260
No. 2. (A-E or A-G, 5-2, S or P) 10 frame body and 1 super, all complete less sections and starters.....		2.45	10.75	21.00	300
No. 3 (A-E or A-G, 6-4-4, S. or P) 8 frame body and 2 supers, all complete.....		3.25	14.75	28.85	350
No. 4 (A-E or A-G, 5-2-2, S or P) 8 frame body and 2 supers, all complete, less sections and starters.....		2.85	12.75	25.00	320
A-E or A-G, 6, 8 frame body only, with frames, division board and starters.....		1.80	7.85	15.25	195
A-E or A-G, 5, 8 frame body only, with frames, division board and no starters.....		1.75	7.60	14.75	190
No. 10 (A-E or A-G, 5-5) 8 frame body, two story.....		2.60	11.50	22.50	320
HIVE BOTTOM.			.35	1.60	3.00
A-Danzenbaker bottom-8.....			.45	2.00	3.75
HIVE COVERS.					40
E-Excelsior or G-gable cover-8.....			.70	3.25	6.20
HIVE BODIES (Brood Chamber).			1.05	4.80	9.25
Empty body for 8 frames 9 1/2 inches deep with tin rabbets.....			1.10	5.00	9.65
5-body-8, with frames and division board.....					130
6-body-8, with frames, division board and starters.....					135
SUPERS.					
No. 1 (4 P, S or I) 8, all complete with starters and Sections.....		.90	4.25	8.10	75
No. 1 (4 P, S or I) 10, all complete with starters and Sections.....		1.00	4.55	8.60	100
No. 2 (2 P, S or I) 8, all complete less starters and Sections.....		.75	3.50	6.60	65
No. 2 (2 P, S or I) 10, all complete, less starters and Sections.....		.80	3.75	7.10	80
No. 0 Plain supers, with flat tin; empty.....		.35	1.60	3.15	40
DANZENBAKER HIVES.					
Danz, A E D, 6-4 M-10.....			2.90	13.50	26.00
Danz, A E D, 5-2 M-10.....			2.65	12.00	23.50
Danz, A E D, 5-10.....			1.85	8.25	16.00
SUPERS.					
Danz, 4 M-10 super.....			1.30	5.65	11.00
Danz, 2 M-10 super.....			1.10	4.90	9.50
Note. —D, Danzenbaker cover, M, Danzenbaker super.					

P. S. Co.'s Dovetailed Eastern Pine Hives**Descriptions and Prices****Order by Number. Five Hives at same rate as ten.**

This hive is similar to the Root Dovetailed Hive, except that it is made from a little different kind of Eastern Pine, but is first class.

No. 1. Dovetailed Hive. (Complete with 1 super) consists of 1 bottom board, 1 body, 1 super, 1 cover, 8 Hoffman brood frames, 1 division board, 2 tightening springs for super, 6 section holders, 6 slotted separators, 24 sections and foundation starters for frames and sections and nails.

Nailed, \$2.35 each; per 10 K. D. flat, \$21.00.

No. 2 Dovetailed Hive is the same as No. 1, less sections and foundation starters.

Nailed, \$2.15 each; per 10 K. D. flat, \$18.50.

No. 3. Dovetailed Hive is the same as No. 1, except it has two supers instead of one.

Nailed, \$3.05 each; per 10 K. D. flat, \$27.25.

No. 4 Dovetailed Hive is the same as No. 3, less sections and foundation starters.

Nailed, \$2.65 each; per 10 K. D. flat, \$23.00.

No. 10 Dovetailed Hive (complete two-story for extracting), consists of one bottom board, 2 bodies, 1 cover, 16 Hoffman brood frames, 2 division boards and nails.

Nailed, \$2.65 each; per 10 K. D. flat, \$23.00.

We advise the use of the above combinations, but if you want other sections or separators make note in your order.



AE64S-8 Hive for 4 1/4-4 1/4-1 1/8 Sections

P. S. Co.'s Dovetailed Western Pine Hives

This hive is really the best value we have ever had. It is standard size and well and carefully made of first-class lumber. The inside fixtures are just the same as in our regular pine hives, and the sections supplied are of the best grade of white Eastern basswood. For general description of the different numbers see corresponding numbers and descriptions above.

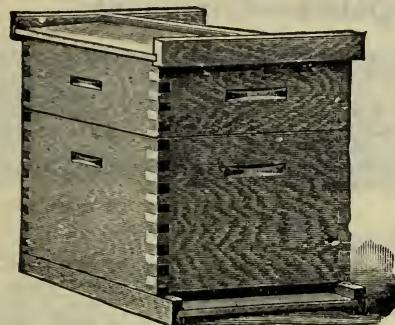
Each K. D. Packed. Weight
Nailed 5 10 of 10

No. 1-8	\$2.00	\$9.25	\$17.75	280	No. 2-8.....	\$1.85	\$8.25	\$15.75	260
No. 1-8, less Super	1.40	6.45	12.50	205	No. 2-8, less Super	1.30	6.10	11.75	195

DESCRIPTION FOR NUMBERS SAME AS ABOVE

Each K. D. Packed. Weight
Nailed 5 10 of 10

Portland Seed Co.'s Western Cedar Hives



These cedar hives are made especially for our Western trade. In construction they are the same as our pine hives, the only difference being that they are made of superior quality of cedar, the best and most lasting wood for our Western climate. The sections and separators used in the supers are the regular No. 1 Eastern stock. Price and quality considered, these hives are the best bargains we have to offer.

PRICES.

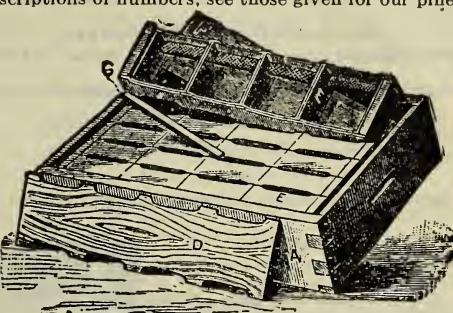
	Each Nailed	K. D.	Packed	Weight of 10.
No. 1-8	\$2.20	\$10.10	\$19.50	275
No. 2-8	1.95	9.00	17.50	250
No. 1-10	2.40	11.00	21.50	270
No. 2-10	2.20	10.10	19.50	252
No. 10-8	2.50	11.35	21.75	300

For descriptions of numbers, see those given for our pine hives.

Portland Seed Co.'s Dovetailed Supers

Unless otherwise ordered we always send S super for the regular stock $4\frac{1}{4} \times 4\frac{1}{4} \times 1\frac{1}{8}$ sections and wood separators. (See cut.)

	Nailed or K. D.	P'ck'd in flat	Wt. of
No. 1-8 Pine	\$0.95	\$4.10	\$7.75 75
No. 1-8 Western Pine	.85	3.80	7.25 75
No. 1-8 Cedar	.90	4.10	8.00 70
No. 2-8 Pine	.75	3.25	6.25 65
No. 2-8 Western Pine	.70	2.95	5.50 65
No. 2-8 Cedar	.70	3.00	5.75 60
No. 8-8 Extracting Super	.75	3.35	6.50 80
No. 0-8 Empty, Western Pine or Cedar	.35	1.55	3.00 40
No. 0-8 Pine	.35	1.60	3.15



Super, Designated as No. 1 or 4-S—Complete

For description of super number, see corresponding number describing hives.

Hive Fixtures and Miscellaneous Bee Supplies

Section Honey Boxes

Our No. 1 Sections are made of the choicest white basswood lumber, and are all perfect in finish and free from defects.

No. 1. Root's Best White.

Per 100, 70c; 500, \$3.10; 1,000, \$6.00.

Portland Seed Co.'s No. 1.

Per 100, 70c; 500, \$3.00; 1,000, \$5.75.

No. 2 Root's Second Grade.

Per 100, 65c; 500, \$2.85; 1,000, \$5.50.

Portland Seed Co.'s No. 2.

Per 1,000, \$5.25.

Weight, $12\frac{1}{2}$ lbs. per 100. For postal rate see inside front cover.

Order any of the following sizes wanted. We have $4\frac{1}{4} \times 4\frac{1}{4} \times 1\frac{1}{8}$, generally used and always sent unless otherwise ordered; $4\frac{1}{4} \times 4\frac{1}{4} \times 7$ to the foot; $4\frac{1}{4} \times 4\frac{1}{4} \times 15-16$; $4\frac{1}{4} \times 4\frac{1}{4} \times 1\frac{1}{8}$.

The $4\frac{1}{4} \times 4\frac{1}{4} \times 1\frac{1}{8}$, $3\frac{1}{8} \times 5 \times 1\frac{1}{8}$, and $4 \times 5 \times 1\frac{1}{8}$ Danzenbaker, having no bee way, are 25c per 1000 less.

Don't forget that we have complete Bee Supply Catalog, Free.

Section Holders—Com. Wt. $25\frac{1}{2}$ lbs. per C.

Root's $1\frac{1}{8} \times 18\frac{1}{8}$ in., slotted.

Each, 3c; Per 100, \$2.60

Western, $1\frac{1}{8} \times 18\frac{1}{8}$ in., slotted.

Each, 3c; per 100, \$2.35.

Root's $1\frac{1}{8} \times 17\frac{1}{8}$ in., plain.

Each, 3c; per 100, \$2.20

Danzenbaker, reversible.

Each, 4c; per 100, \$3.00

Bottoms only— $1\frac{1}{8}$ inches wide, slotted or plain. Wt. 1 lb. per 10. Each, 2c; per 100, \$1.35.

Comb Foundation

Packed in 1, 2, 3, and 5-lb. boxes.

GRADE	Size of Sheets	No. per lb.	In Lots of 1 lb.	In Lots of 10 lbs
Light Standard Brood	$7\frac{1}{4} \times 16\frac{1}{8}$	7	\$.65	.63
Extra Light Brood	$7\frac{1}{4} \times 16\frac{1}{8}$	9	.70	.66
Light Section	$3\frac{1}{8} \times 15\frac{1}{2}$	28	.70	.69
Extra Light Section	$3\frac{1}{8} \times 15\frac{1}{2}$	30	.75	.72

Separators

Slotted Wood, $4\frac{1}{2} \times 18$, Eastern.

Wt. 8 lbs. per 100

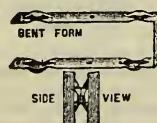
Per 10, 15c; per 100, \$1.00.

Slotted Wood, P. S. Co.s.

Wt. 8 lbs. per 100.

Per 10, 15c; per 100, \$1.00.

Frames



Recommended where there is much propolis. Spacing accurate and frames handle easily.

Price, per 10, 50c; per 100, \$4.00.

Improved Hoffman Frames

Weight per 100, $37\frac{1}{2}$ lbs.

Improved F. F. Root's... Per 10, 40c; 100, \$3.50

Improved F. F. P. S. Co. Per 10, 35c; 100, 3.25

Western Per 10, 35c; 100, 3.00

Half Hoffman, Root's... Per 10, 30c; 100, 2.65

Danz, Reversible..... Per 10, 40c; 100, 3.30

Plain separators. 8 lbs. per C. 10, 10c; 100, 75c.

Fence, P. or I. 18 lbs. per C. 10, 25c; 100, \$2.10.

Fence, Danzenbaker M. Weight, 16 lbs. per 100.

Per 10, 25c; per 100, \$2.20.

If you have Beeswax to sell, send it to us.

We will take it in trade, or pay you cash.

Hive Fixtures and Supplies—Continued

Honey Extractors

Ball bearings and slip gear devices are furnished on all of our Extractors.

THE NEW ROOT AUTOMATIC EXTRACTOR. Fitted with a brake that reverses the frames instantly without jar or injury and without stopping. This is an exclusive feature of the Root Automatic. We furnish the 4 frame size. Weight 210 lbs.

Price, \$32.00.

No. 5, NOVICE.

Two frame for any size frame not over 9 1/2 by 18 1/2 inches; weight, 45 pounds.

Price, \$10.50.

No. 15, COWAN REVERSIBLE.

Two Frame. Weight, 85 lbs.

Price, \$14.50.

Our complete catalog of everything necessary for successful Beekeeping sent free on request.

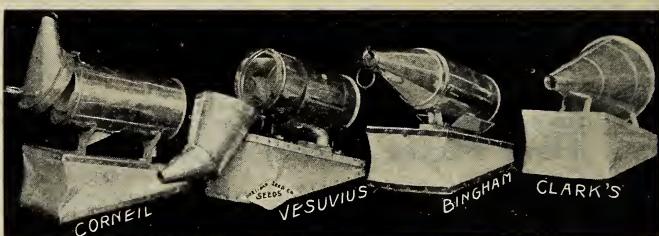
Smokers

(See cut.)

Every owner of a hive of bees should have a smoker. A few blasts of smoke will quiet the bees so that they can be handled with safety. (See cut of the leading kinds.)

Clark's Cold Blast. Probably the most popular smoker in use today. Weight 1 1/4 lbs.

Price, 65c.



Improved Cornell. Makes a good strong blast. Standard size, 3 1/4-inch, weight 2 lbs., \$1.00. Standard Jumbo, 4-inch, weight 2 lbs., \$1.50. Standard Copper, 3 1/4-inch, weight 2 lbs., \$1.75. Junior, 2 1/2-inch, weight, 1 1/4 lbs., 85c.

Vesuvius. A hot-blast, breech-loading smoker. Weight 2 lbs.

Price, \$1.10.

Crane. Similar to the Bingham, but somewhat heavier. Weight 1 1/2 lbs.

Price, \$1.35.

Danz, 20th Century. Combined hot and cold blast. Weight 1 1/4 lbs.

Price, \$1.15.

Honey Shipping Cases

Non-Drip.

12-lb. Shipping Cases, Root's.

Nailed, each, 20c; flat, 10, \$1.70.

24-lb. Shipping Cases, Root's.

Nailed, each, 30c; flat, 10, \$2.60.

24-lb. for 3 5-8x5 sections, Root's.

Nailed, each, 30c; flat, 10, \$2.35.

32-lb. for 1 1/4-inch sections.

Nailed, each, 30c; flat, 10, \$2.50.

24-lb. for Danzebaker sections.

Nailed, each, 30c; flat, 10, \$2.35.

Feeders

Gray's. This is designed to be placed tight up against the entrance. Price, 20c; by mail, 30c.

Alexander. Latest out. Used under rear end brood chamber. Weight 1 1/4 lbs.

Price, 30c.

Simplecity. Weight 6 ozs.

Each, 10c; by mail, 15c.

Milner's. Sets on hive like a super; holds about 25 pounds of syrup. Weight 5 lbs. K. D.

Nailed up complete, 35c; in flat, 30c.

Boardman's. Weight 1/2 lb.

Price, 25c; without jar, 20c

Division Board Feeders. Weight 1 1/4 lbs.

Each, nailed, 30c.

Foundation Fasteners

Parker's. Well worth the price.

Price, 35c; by mail, 45c.

Daisy Foundation Fastener. Will put starters in better and faster than any machine before introduced. Weight, 5 1/2 lbs.

Price, without lamp, \$1.00; with lamp, \$1.25.

Van Deusen Wax Tube Fastener.

Price, 20c; by mail, 25c.

Wire Imbedders

The Easterday. Weight 4 ozs.

Price, 20c; by mail, 25c.

Spur Wire Imbedder. Teeth set so as to straddle the wire while imbedding it. Weight 4 ozs.

Price, 20c; by mail, 23c.

Wax Extractors

Doolittle Solar Wax Extractor. With this the sun supplies the heat; weight 30 pounds.

Price, \$4.60

Root's German Wax Extractor. Price, \$13.00

Hatch Wax Press. Price, \$ 7.35

Swiss Wax Extractor. Comb is put in wire basket inside of can and set over hot water. Simple and good.

Price, \$4.00; with steam generator, \$5.00.

Bingham. This is strong, well made. The "Conqueror" and "Doctor" not excelled for use in large aparies.	Each
Bingham Conqueror. Weight 1 lb.....	\$1.00.
Bingham Little Wonder. Weight 1 lb.....	.60
Bingham Doctor. Weight 1 1/2 lbs.....	1.20
Bingham Large. Weight 1 lb.....	.80
Bingham Engine. Weight 1 1/2 lbs.....	1.60.

Bee Entrance Guards

Root's or Tinker's. These are to admit workers, but exclude drones. Weight 1/4 lb.

Price, 10c, by mail, 15c.

Improved Wire Front. Price, 20c; by mail, 25c.

Alley's Drone and Queen Trap

A non-swarming device. Weight 1 lb.

Each, 50c.

Improved Wire Front. Weight 1 lb.

Each, 55c.

Hive Parts

Division boards. Each, 9c; 10 for 90c.

Followers Each, 5c; 10 for 35c.

Tightening spring. Each, 1c; 10 for 8c.

Porter Bee Escape

Great Labor-saver. Weight 2 ozs.

Price, 20c, postpaid.

Mounted. Weight 2 1/4 lbs., Each, 40c.

Porter Honey House Escape

No extracting room is complete without one or more of them.

Each, 25c, postpaid.

Hive Fixtures and Supplies Continued



Bee Brushes

Coggshall's. (See cut). Price, 20c; by mail, 25c
Dixie. (See cut). Price, 20c; by mail, 25c

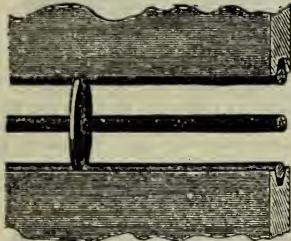
Gloves, Rubber

Ladies. Sizes 7, 8, 9. Price, \$1.25; by mail \$1.35
Men's. Sizes 10, 11, 12. Price, \$1.50; by mail \$1.60
Men's Half Long. Sizes 13, 14, 15. Price, \$1.75 by mail, \$1.85.

Long Heavy Canvas. Price, 60c; by mail, 70c.
Note.—To insure getting proper size, mark outline of hand on sheet of paper.

Honey Boards

Used to confine the queen to the brood chamber. Nos. 1 and 11 are unbound zinc. Nos. 12 and 13 are wood-bound, with a bee space one side.



**NEW
STYLE
WOOD AND
WIRE
HONEY
BOARD**

No sharp edges for the bees to pass over

No. 11. 8-frame, unbound, 12x19 $\frac{1}{2}$ inches. One, 25c; ten, \$2.00.
No. 1. 10-frame, unbound, 14x19 $\frac{1}{2}$ inches. One, 25c; ten, \$2.10.
No. 13. -8frame, wood-bound, 13 $\frac{1}{2}$ x20 inches. One, 30c; ten, \$2.50.
No. 12. 10-frame, wood-bound, 16x20 inches. One, 30c; ten, \$2.75.
No. 8. 8-frame, wood and wire, 13 $\frac{1}{2}$ x20 inches. One, 40c; ten, \$3.75.
No. 7. 10-frame, wood and wire, 16x20 inches. One, 45c; ten, \$4.00.

Perforated Zinc

Used for making honey boards, also entrance guards, queen and drone traps, etc.

Perforated sheets, each, 32x96, \$2.20. Less than a sheet, per square foot, 15c.

Manum's Swarming Device

A most complete swarming device. The swarmer is light, conveniently carried, and will reach a swarm 20 feet from the ground. Complete, \$1.65 wire basket, with ball, no pole, \$1.25

Miscellaneous Bee Supplies

Queen Cell Protector. Doolittle. Each, 3c; by mail, 5c.

West's Cell Protector.

Each, 8c; 10 for 65c; by mail, 75c.

West's Spiral Cage.

Each, 10c; 10 for 80c; by mail, 90c.

Hive Clamps, per pair, 5c; 10 pairs, 40c; without screws, 10 pairs, 35c. Add 3c per pair postage.

Hill's Device. For covering frames in winter.

Each, 10c; 10 for 75c; postpaid, \$1.00

Hubbard Section Press.

Price, \$2.85.

Root's Section Press.

\$2.25.

Hive Tent, weight 6 lbs.

Price, \$3.00

Honey Knives

Novice.	Price, 85c; by mail, 95c.
Quinby.	Price, \$1.00; by mail \$1.10.
Bingham.	Price, 80c, by mail, 90c.
Honey Knife.	Broad square blade. Price, 15c, by mail 20c.

Cages for Queens

Benton. For mailing and introducing. Each, no candy, 5c; by mail, 7c; with candy, each, 10c. by mail.

The Peet. Each, 10c; by mail, 12c.

Root's Queen Rearing Outfit

A complete set of tools and materials, including book of instructions, enabling any one with very little experience to rear his own queens at small expense.

Price, \$4.75.

Queen Bees and Colonies

We are in position to furnish full-blooded Italian queens, and full colonies. It takes about five days to get these in from the apiary, so do not expect queens by return mail.

Untested Queen. April, \$1.75; May, June, July, August, September, \$1.25.

Tested Queen. April, May, June, July, August, September, \$2.00.

Selected Tested Queen. April, \$3.50; May, June or July, \$2.50; August or September, \$3.00.

Full Colony. In an 8-frame hive. Price, \$8.00.

Bee Veils

Globe. Has five bars that keep veil away from head. Weight, 6 oz. Price, \$1.00; postpaid, \$1.10.

Hat Veil. These veils have a rubber band round the top, so as to fit the hat snugly.

No. 1 Veil, made entirely of silk tulle.

90c., Postpaid.

No. 2 Veil, cotton tulle, silk face.

65c., postpaid.

No. 3. Veil, cotton tulle throughout.

50c., Postpaid.

No. 30 Tinned Wire

$\frac{3}{4}$ -ounce spools. Each, 5c; dozen, 45c.

$\frac{1}{4}$ -pound spools. Each, 15c; dozen, \$1.50.

$\frac{1}{2}$ -pound spools. Each, 25c; dozen, \$2.25.

1-pound spools. Each, 35c; dozen, \$3.45.

5-pound coils. Each, \$1.35.



TIN RABBETS.

Price: 12-Inch	Per 10, 15c; per 100, \$1.25.
14-Inch	Per 10, 15c; per 100, \$1.30.
15-Inch	Per 10, 15c; per 100, \$1.35.

T-TINS.

Price: 12-Inch	Per 10, 15c; per 100, \$1.25.
13-Inch	Per 10, 15c; per 100, \$1.40.
14-Inch	Per 10, 15c; per 100, \$1.40.
15-Inch	Per 10, 20c; per 100, \$1.50.
16 to 20-Inch	Per 10, 20c; per 100, \$1.75.

FLAT TINS.

Price: 12-Inch	Per 10, 10c; per 100, 50c.
13 $\frac{1}{2}$ -Inch	Per 10, 10c; per 100, 50c.
14-Inch	Per 10, 10c; per 100, 60c.
15-Inch	Per 10, 10c; per 100, 75c.



Books for Bee Keepers. See Book List, page 46 and 47.

"MANDY LEE" Incubators for 1913

Heat Quickly

Run Evenly

Regulate Automatically

DO YOU KNOW that to have big hatches of vigorous chicks moisture must be in proportion to heat and fresh oxygen must be supplied. *Mr. Geo. H. Lee was the first to make these remarkable discoveries.*

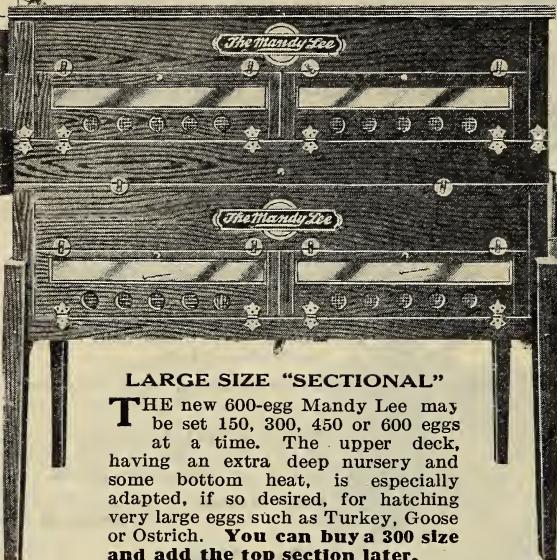
Here Is His Rule

High Heat must have Low Moisture

Low Heat—High Moisture

At 102 degrees, 50 to 55 per cent moisture is good, but for every degree of heat added moisture must drop 5 per cent to be safe.

The "Mandy Lee" is built to automatically meet these requirements—no other incubator can give as good results.



LARGE SIZE "SECTIONAL"

THE new 600-egg Mandy Lee may be set 150, 300, 450 or 600 eggs at a time. The upper deck, having an extra deep nursery and some bottom heat, is especially adapted, if so desired, for hatching very large eggs such as Turkey, Goose or Ostrich. **You can buy a 300 size and add the top section later.**

FRESH OXYGEN

Life giving oxygen is freely supplied at the egg level **when the chicks are coming out**, without losing the moisture or lowering the temperature.

EGG LEVEL VENTILATION

The new "Mandy Lee" has large ventilators in the lower part of the door. These openings are covered with finely woven brass wire cloth; through these ventilators fresh oxygen is constantly being supplied and the carbonic acid gas passing out. This diffusion of gases has no perceptible effect on the heat or moisture, but insures the chicks against suffocation at a time when the machine cannot be opened. The only perfect method of ventilation—no draft. No other incubator gives this important advantage.

Egg Tray has a combined wire and slat bottom, and can be used either way. Large machines are furnished with sectional trays and one extra tray for turning. This enables you to turn the eggs quickly and to change trays to any position in the egg chamber.

The "Mandy Lee" is GUARANTEED to hatch Bigger Chicks, Stronger Chicks and More Chicks than any other incubator or even the mother hen.



READ

WE GUARANTEE that the new Mandy Lee Incubator, equipped with our new Automatic Regulator for handling Heat, Moisture, and Ventilation, will, on a series of competitive hatches of eggs taken from the same flock, beat any other incubator in the world from five per cent to twenty-five per cent and in any climate, season, or altitude.

We guarantee further that it will bring BETTER, LARGER, and STRONGER chicks; also, that it will bring MORE and BETTER chicks than can be had from hens covering the same number of eggs. We guarantee our largest incubators to do equally as good work as any of our smaller sizes.

Our instructions must be followed and, in competitive hatches, eggs from the same flock must be used.



The new Automatic Regulator for Heat, Moisture and Ventilation. Direct ventilation of egg chamber if heat goes too high.

Be sure to write for the **LEE BOOK-LETS FREE ON REQUEST.**



MANDY LEE HYGROMETER

Accurately registers the moisture, is easily read, makes possible a **SURE HATCH** of vigorous chicks. Free with every incubator. Sold alone, \$2.50, postpaid

NEW MOISTURE PAN can be removed or refilled without opening incubator.

DROP NURSERY BOTTOM, permitting removal of chicks without opening incubator.

NURSERY TRAY has a cloth bottom that can be turned up until the eighteenth day, thus cutting off the air space beneath the eggs.

SPECIAL ADJUSTMENT OF EGG TRAY, THERMOMETER AND NURSERY, making the "Mandy Lee" Incubator **ADAPTABLE** to any size egg, from Bantam to Ostrich.

GEO. H. LEE CO.

"MANDY LEE" INCUBATORS — Continued

THE HEATING SYSTEM

THE HEATING SYSTEM insures the same degree of heat to every egg and is an exclusive Lee feature. Heat can be adjusted from end to end, and in the larger sizes from center to back and front. The heating pipes can be removed instantly for cleaning by drawing them out without removing the top. The hot air does not come in contact with the eggs as in other hot air incubators, but warms them by radiation through the air-tight metal pipes. The control and adjustment is so perfect that the heat will vary but a fraction of a degree, even should the outside temperature change as much as 20 degrees.

The features of the "Mandy Lee" Heater

All parts exposed to heat are fully protected by sheet metal and asbestos.

A special burner with high wick tube and wide flame slot.

NEW SINGLE WALLED CHIMNEY

Increases the heating capacity, reducing the oil expense and lowering the outside temperature of the heater. It is also self seating and is always in place.

A lamp bowl in one piece.

A special vent for any gas forming in the lamp.

A perforated sheet metal cylinder in top of heater which puts out the lamp in case of accident.

A protecting circular shield guarding the body of the Incubator.

As a further precaution the lamp cannot be filled without removing it.

A self-seating chimney.

The "Mandy Lee" is built of air-seasoned California redwood, is of handsome cabinet construction, with cherry finish, has heavy brass and bronzed metal trimmings, double glass doors and the double walls are insulated with from 1 1/2 to 3 inches of asbestos or mineral wool **No other incubator is so well built.**

"Mandy Lee" Incubators—Made in Seven Sizes

All complete with Lamp, Hygrometer, Thermometer, Moisture Pan, Combination Egg Tray and Egg Tester. Prices quoted are packed for shipment F. O. B. Portland.

	Wt.	Crated	Price
100-Egg—The right size for the small breeder	133 Lbs.	\$18.00	
120-Egg—The best for the average poultryman	140	21.00	
150-Egg—The new size	160	24.00	
200-Egg—Very popular; a special value at the price	200	27.00	
240-Egg—This size for the larger plants; much in demand	216	30.00	
300-Egg—This is the ideal machine and can be increased to 600 or 900-egg	285	35.00	
600-Egg—The new sectional incubator for large plants	550	65.00	
300-Egg Sectionette—Top section for increasing capacity of 300-egg size	260	32.00	

MANDY LEE BROODERS

The Only Brooders That Provide Natural
Broodings Condition

DIRECT CONTACT HEAT

"Mandy Lee" Direct Contact Heat Brooders are the most successful and satisfactory made. No improvement seems possible; no change necessary. The idea of applying a soft contact heat direct to the backs of the chicks was never incorporated into anything practical until Lee began the manufacture of the "Mandy Lee," nor until that time had the correct principle of brooding been recognized, namely, that the little chick cannot comfortably breathe the same heat required for giving the necessary warmth to its body. We cannot better illustrate this theory than by repeating the following:

FOR INSTANCE: Some night when you are lying in bed snugly covered and comfortably composed for sleep, just put a thermometer under your clothing next to your body, and take the temperature of the air immediately surrounding your real self. You will find it to be somewhere between 95 and 98 degrees. Now suppose that instead of this method of comfortably warming yourself, you should go and lie naked in a room heated to even 95 degrees. You can imagine how uncomfortable you would be. Perhaps you may recollect some hot summer evening when you rolled and tossed all night, unable to sleep on account of the heat. This is because you cannot be either comfortable or healthy if your head is as warm as your body. **Buy a Brooder with Blankets.**

THE HOVER—A long, narrow hover—the ideal shape—heated evenly from end to end by a triple set of overhead pipes, one pipe passing entirely through and carrying out all the smoke, gas, etc., from the lamp, which is located outside the brooder.

Again, a second pipe carrying cold, pure air into the hover, which is heated by the first pipe, and that heated air heats the blanket to the temperature of a hen's body.

The hover blanket is made of regular bed blankets, shaped in the form of a semi-circle, hanging loosely and in the center to within an inch of the floor, and with curtain front and back. (See sectional view.)

SOFT-CONTACT HEAT—Here is how the chicks get that soft, contact heat, so natural, so necessary to their comfort, and so entirely absent in other brooders.

The little chicks lay with their backs up against this warm blanket, just like a hen's body, and their heads out in the open air, just like the illustration above.

There is no crowding here, no smothering; no trampling. Each chick gets just as much heat as it wants and no more. In other brooders all the chicks must get the same amount of heat, but not so in the Mandy Lee. **It's a natural mother for them.**

"Mandy Lee" Brooders Come in Eight Styles and Sizes—

THE NO. 1, OR REGULAR, which we recommend for all general purposes.

THE NO. 2, OR SECONDARY, fills a demand for a practical, economical method for caring for chicks from three to eight weeks old.

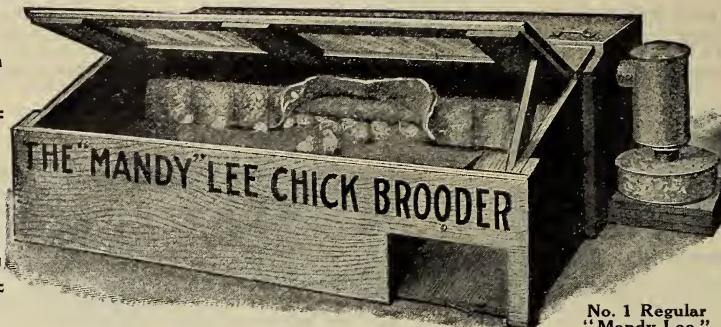
3 Styles of NEW FIRELESS BROODERS, which have given splendid satisfaction, and are very popular as they are safe and economical.

THE NEW OUTDOOR HEATED BROODER—See following pages

MANDY LEE BROODERS—Continued

"Hovers 'Em
like a Hen"

**FULL
DETAILS
IN THE
LEE
BOOKS
FREE to you.**



Showing
portion
of Hover,
Lamp,
Extension-
Chimney, etc.

No. 1 Regular
"Mandy Lee."

ADVANTAGES OF THE LEE BROODER.

No lamp fumes or superheated air in the hover.

Glass Front forming a comfortable exercising room for the little chicks, with similar space at back.

Opens up and cleans easily, an important feature.

All Cloth and Blankets are on wood strips, easily removable for cleaning or replacing..

Lamp Flame is always in plain sight, lamp easily removed.

A Lamp Burner that does not heat and that successfully burns medium grade oils

No. 1, or Regular "Mandy Lee"—Illustrated above

Outside dimensions, 3x4 feet. It is as large as any 200-chick brooder on the market, but we call it only 100-chick size—50 chicks on each side of the hover. It will hold more, but it doesn't pay to crowd. Better have 50 healthy chicks in your brooder than 100 weakly, sickly ones. The cost of a few brooders is insignificant as compared to the value of the season's hatch.

Price, complete, including Box Germozone, Drinking Fountain and Thermometer, \$15.00.

**60 CHICK BROODER
Heated**

Lamp, heater, hover construction, cloth and metal parts, and width exactly the same as our "regular" brooder. Length of hover 30 inches; openings in swinging door covered with 60-mesh brass-wire cloth, and, when lowered, either folds directly against hover opening or rests on flanged front of runway, making a rat and cat proof exercising space for the chicks.

Price, \$6.50

The "MANDY LEE" Booklets contain more advanced, practical working knowledge on incubation than all other literature on this most important subject.

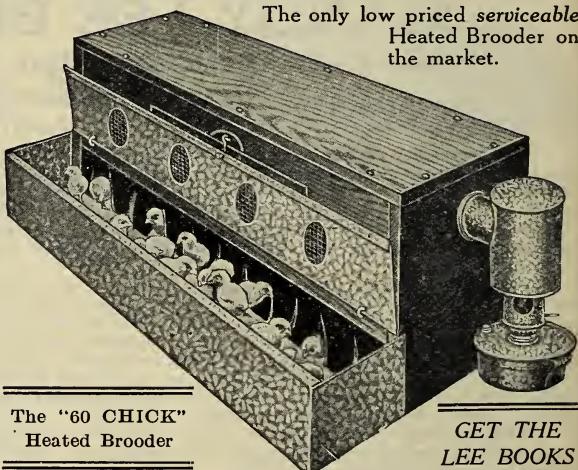
FREE ON REQUEST

**No. 2 Secondary
Brooder**

This is a larger, more roomy and less expensive brooder for older chicks or those from three to eight weeks of age. It is all hover, and, while occupying no more floor space than the other brooder, gives fully twice the actual brooding capacity.

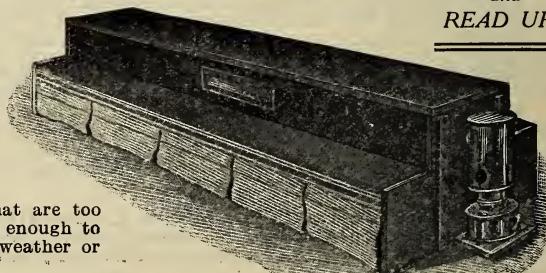
It is simply a mother for the chicks that are too large for the ordinary brooder but not old enough to "hustle for themselves" during the damp weather or cool nights.

Once used this brooder is almost indispensable. It seems to fit into a place no other brooder can occupy. It can be used anywhere—in a poultry house, barn, shed, piano box—just so it is protected from wind and storm. **Price, \$9.50.**



The "60 CHICK"
Heated Brooder

**GET THE
LEE BOOKS
and
READ UP!**



Mandy Lee Secondary, No. 2

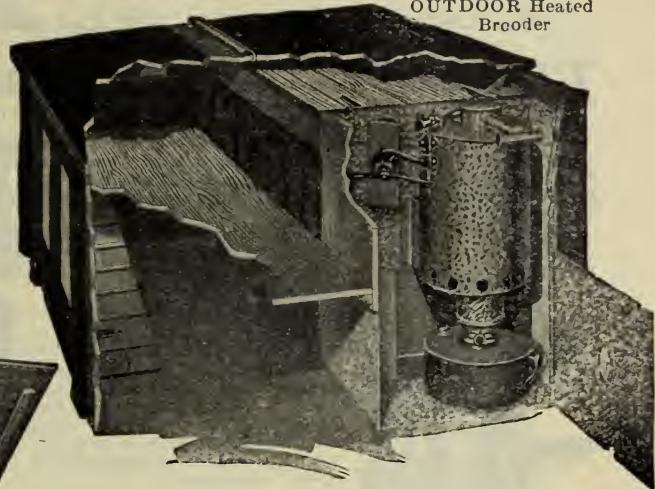
NEW LEE BROODERS

OUTDOOR, HEATED and REGULATED BROODER

Instead of the usual single floor we have a double floor 3x4 feet, the lower floor being directly on the ground where the chicks come in contact with mother earth even in most inclement weather. We have the Mandy Lee contact heat under a warm Blanket—a long, narrow hover with a curtain on both sides—just like our regular brooder—just like the old mother hen. The regulator is the same style as on the incubator. Capacity 100 to 150. Weight 115 lbs.

Price, 4-foot size, \$20.00.

OUTDOOR Heated Brooder



No. 25 OUT-DOOR FIRELESS BROODER

New Outdoor Fireless No. 25

Has rain proof top, glass front, large feeding compartment and removable board floor. A thoroughly practical and safe brooder. Size 2x4 feet, see cut. **Price, each, \$10.00.**

New Indoor Fireless

A fireless brooder for use inside, having the advantage of an adjustable hover that can be placed over the chicks, bringing them together gently and safely. A very convenient and useful brooder. See Lee catalog for complete details. **Price, each, 100 chick size, \$4.00.**

"Mandy Lee Fireless Brooder" Safe, Economical, Practical

FIRELESS BROODERS offer many advantages in economy, safety and convenience, and under equal conditions will rear stronger, healthier, larger chicks than a heated brooder. We have had wonderful results with the "**Mandy Lee**" and recommend it as the **Best Fireless Brooder**.

A feature of the "**Lee Fireless**" is the adjustable hover; made as light as possible, being a special weave of open mesh flannel stretched on a frame in such a manner as to give a proper circulation of air and even distribution of heat.

THIS ADJUSTABLE HOVER is the most important improvement in Fireless Brooders, and can be raised or lowered according to the outside temperature or to suit the size or number of chicks. The adjustment is easily made from the front of the Hover without opening the top.

Besides this new Adjustable Hover, "**MANDY LEE' FIRELESS BROODERS** have double doors, properly arranged ventilators, metal covered top and rain shield. All parts are readily accessible for cleaning and airing.

Fireless Brooders, like other brooders, should be kept in a place of even temperature as far as possible, and as the warmth depends on the natural heat of the body, enough chicks should be together to maintain the proper temperature. This can then be regulated by the Adjustable Hover.

Don't overcrowd your Fireless Brooder; treat it like any other brooder and you will get larger, more vigorous chicks that feather out earlier than those raised in the heated brooders.



GERMOZONE in the drinking water keeps chicks healthy

Liquid or Tablets. 50c

"Mandy Lee Fireless Brooders" are made in two sizes: No. 8, for 100 chicks \$6.00
No. 10, for 200 chicks 9.00

Our Catalog of Poultry Supplies

Listing every thing necessary for the profitable production of poultry and giving practical information on poultry diseases care and treatment should be in the hands of everyone interested in poultry.—Let us send you a copy.

MANN BONE CUTTERS

**The Only Bone Mill That Will Cut Both Green and Dry Bone
Will Not Clog.**

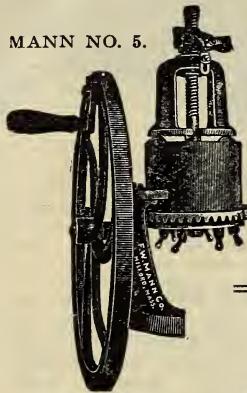
THE Mann's Green Bone Cutter is offered to the poultry world on a warranty to produce a perfectly edible poultry food, with no waste, from any lot of green bones, with less labor and less annoyance than any other bone cutter.

We send the Mann's to any responsible poultryman with this understanding, if you are not satisfied that it meets every claim we make for it, notify us and we will give you instructions to return the machine, and will, upon receipt of same refund purchase price. Could you ask more?

The Mann's is the only machine which has a self governing feed, producing uniform pressure against the knife, whether the bone be hard or soft. You set the machine to suit your strength, and it never requires more power than you set it for.

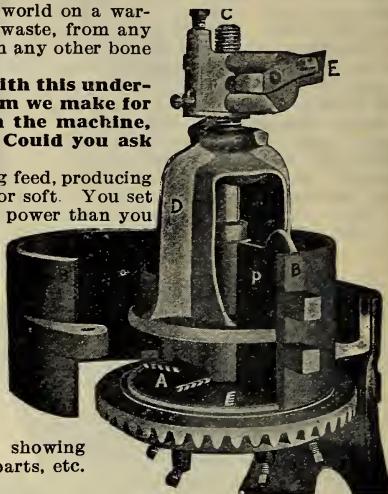
Mann's No. 5

MANN NO. 5.



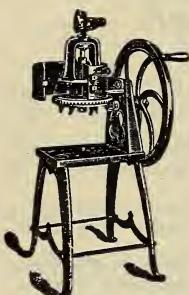
Has four knives, large solid cylinder, and has the latest patent automatic governing spring feed which makes it one of the best low-priced bone cutters ever offered. We can furnish with crank, balance wheel, or mounted on iron stand. (See cut).

Mechanism of the Mann's showing automatic force-feed, cylinder parts, etc. Mann's catalog gives all details.

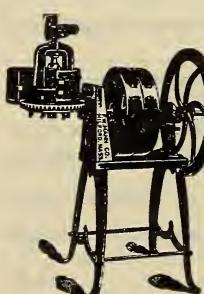


Fresh Cut
BONE
Is the
FOOD
that makes
HENS LAY

Interesting
Booklet
"BUGS and
WORMS"
FREE



MANN'S NO. 9



MANN'S NO. 11

Mann's No. 7

The New No. 7 is mounted on a strong iron stand, and has patent automatic governing spring feed. Large, open-hinged cylinder, giving instant access to all working parts, has six knives, gear guard, anti-clog device, heavy balance wheel and other improvements. (See cut).

Mann's No. 7½

Adapted to run either by hand or power without any change. The particular advantage of the 7½ is that while it is a complete power machine, it can be operated by hand just as easily as the No. 7. It is recommended even if you have no power at present, for should you get power in the near future, you need be at no further expense. It has all the improvements. It meets a long-felt want.

Mann's No. 9

About the same as No. 7, except that it has a larger cylinder and greater holding capacity, different design and larger table.

Mann's No. 11

The No. 11 is exactly the same as No. 9, with the power parts added. It has all the latest improvements. Capacity, 100 pounds per hour.

Mann's No. 12—Power

Strictly a power machine, and full of business from top to toe. Capacity, 120 to 150 pounds per hour. Horsepower required, one to two. Just the machine for marketmen, extensive breeders, or any one who has large quantities of bone to cut.

Price List of Mann's Bone Cutters

New Styles

	Price	Wgt.
No. 5C (with crank handle).....	\$ 7.75	30
No. 5B (with balance wheel).....	10.00	55
No. 5BM (B. W. and iron stand).....	13.00	80
No. 7 (B. W. and iron stand).....	15.00	107
No. 7 ½ (hand or power).....	21.00	150 MANN NO. 7.
No. 9 (B. W. and iron stand).....	22.00	163
No. 11 (power machine).....	30.00	215
No. 12 (power machine).....	35.00	260
No. 15 (power machine).....	67.50	420



MANN'S HANDSOME 40-PAGE CATALOG

Is fully illustrated and tells all about the different style green bone cutters, clover cutters, corn shellers, grit smashers, etc., and contains much valuable information. Free on request.

Wilson Dry Bone Mill No. 1

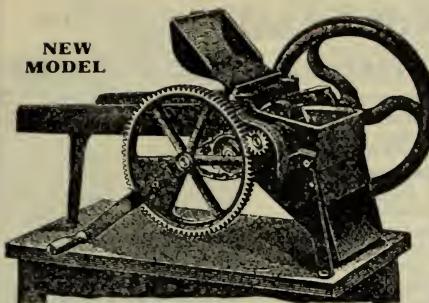
This is a practical mill, grinding all kinds of shell, crockery, grit, burnt or dry bone, feed, etc. Instantly adjusted to grind coarse or fine. Every poultry keeper should have one of these mills. You will find them very convenient and serviceable. Weight, 33 pounds. Diameter of hand wheel, 20 inches.

Price \$5.00.

Wilson Mill No. 0

A family grist mill in itself. Especially made for grinding flour, corn meal, spices, coffee, etc., for table use. It can also be adjusted for cracking grain. Capacity and size same as No. 1; hopper round. Weight, 30 pounds.

Price \$5.00.



"New Model" Clover Cutter

The "New Model" Clover Cutter is designed for cutting, either green or dry, such growths as clover, alfalfa, vegetable tops, etc., into $\frac{1}{8}$ -inch lengths. These growths are the cheapest and most productive egg-forming poultry foods for cold weather.

The feature that gives the "New Model" easy supremacy over similar machines is the **cutting mechanism**. The machine can be kept in perfect order at all times, because the cutter bar is adjustable and easily accessible, and the four 7-inch spiral steel knives can readily be removed for sharpening. Those who are familiar with "ordinary" cutter construction will appreciate these improvements.

The "New Model" is made only of iron and steel, from entirely new patterns. It is a strong feeder, has large capacity, runs unusually easy and will do perfect work indefinitely. Length over all, 28 $\frac{1}{2}$ inches.

The machine is intended to be mounted on a box or bench at any height to suit the operator. Weight, 60 pounds.

Price \$10.50.

Bond's Grit Machine

Will break rock, limestone, ore, crockery, glass, dry clam and oyster shells, etc. A boy of seven can work it. Drop the material in the top and work lever up and down quickly, but not with great pressure. Do not use green bone or wet oyster shells, but dry them. Weight, 25 pounds.

Price \$4.00.

Mann's Corn Sheller

Best low-priced corn sheller made. A profitable tool if you have corn to shell.

Price, \$3.00

Mann's Clover Cutter

Made entirely of iron and steel; cannot warp or shrink. It cuts any kind of hay or clover, either dry or green, and more rapidly than any other make. Each revolution of the balance wheel produces twelve cuts. Do not buy a clover cutter until you have seen Mann's.

Price, \$10.50; mounted on iron stand, \$12.00.

Wire Netting for Poultry Runs, Trellises, Etc. No. 20 Wire, in rolls 150 feet long, in the following widths:

	12-in.	18-in.	24-in.	30-in.	36-in.	48-in.	60-in.	72-in.
2-inch mesh.....	\$0.75	\$1.05	\$1.35	\$1.75	\$2.00	\$2.75	\$3.40	\$4.00
1-inch mesh.....	1.65	2.50	3.30	4.15	4.95	6.60	8.40	9.90
Short lengths, 2-inch mesh, 1c sq. ft.; 1-inch mesh, 3c.	Prices subject to change without notice.							

"Union Lock" Netting

Union Lock "Square Mesh" Poultry Netting--Made of two strands of No. 20 wire run horizontally with No. 19 steel wire vertical strips every three inches, the first seven cables $1\frac{1}{4}$ inches apart; the next six are two inches, and all above are four inches. This makes the fence tight at the bottom, where needed for small chicks. This fence will fit any unevenness of ground, and because of its strength and construction requires no top or bottom rail and only half as many posts as ordinary wire netting.

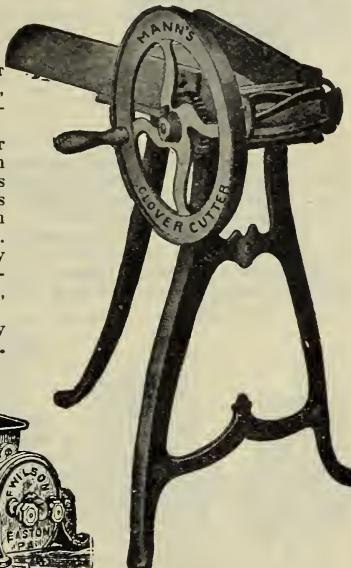
Price, per Roll

12-inch, 165 feet to the roll.....	\$1.70	48-inch, 165 feet to the roll.....	4.29
18-inch, 165 feet to the roll.....	2.25	60-inch, 165 feet to the roll.....	4.80
24-inch, 165 feet to the roll.....	2.85	72-inch, 165 feet to the roll.....	5.50
36-inch, 165 feet to the roll.....	3.50	Galvanized Staples, per lb.	10c

Thoroughbred Poultry and Eggs for Setting

Send us your orders for Poultry or Eggs, **any breed or strain**, and secure the advantage of expert, critical selection, that guarantees full value for your money. We do not depend on any one breeder, but can give you the pick of the prize-winning strains at right prices.

OUR SPECIAL POULTRY SUPPLY CATALOG lists everything necessary for the profitable production of poultry and contains valuable information on poultry diseases, care and treatment. We want everyone interested in poultry to have this catalog and the "**Mandy Lee**" Books. Free.

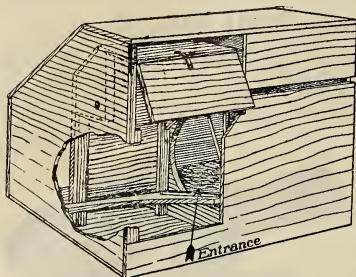


Wilson's Mill No. 1

Mann's Clover Cutter Mounted

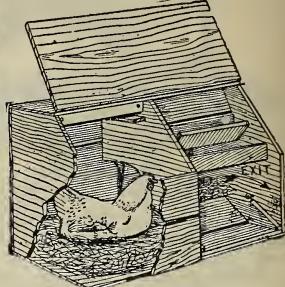
POINTS OUT
THE DRONES**The Success Automatic**PROTECTS THE
LAYERS**Combined, Designating, Laying, Hatching and Trap Nest**

Every poultryman knows the value of a Trap Nest. The trouble has been to get a satisfactory one. We offer the "Success" and will welcome your criticisms and enquiries. Descriptive pamphlet on request.

**The "Success" Trap Nest**

automatically separates the laying hens from the non-producers. Works without attention or care from you. Shows "Who's who" in your hen yard and you do not have to watch the hen. She releases herself. No other trap nest gives this advantage.

By the simple turn of a Screw Hook the "Success" can be converted into a regular trap nest that will hold the hen until released.

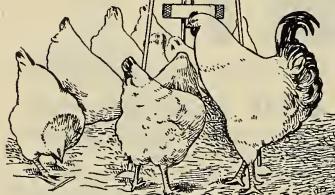


The hen passing in must step upon the board to get through onto the nest, her weight being sufficient to close the entrance. The action is free and well balanced, and does not frighten the hen in the least. As it has been proven time after time that hens will leave their regular nests and use the "Success" nest, preferring the seclusion which it gives.

For setting hens, the Success Nest is the perfect one, as it cannot be occupied by more than one hen at a time. Prices: No. 2—Two nests, \$3.50; No. 3—Three nests, \$5.00; No. 4—Four nests, \$6.50.

For use in Poultry Houses where the nests are built in, we can furnish the same nest K. D. without top or bottom board. Price: 2-nest, \$2.75; 3-nest, \$3.75; 4-nest, \$5.60.

Chicks 6 weeks old will operate this feeder.

**Norwich Automatic Exerciser and Feeder**

Every kernel of grain put into this feeder will go to your flock, not a single one will be wasted. Absolutely bird and rat proof. Rain or dampness cannot effect it. Saves its cost in 90 days by preventing waste, requires no attention except filling of hopper when empty. Adjustable for slow or fast feeding.

This is the most successful and practical automatic feeder ever invented the slightest "peck" on the bait bar scattering the grain in the litter in a wide circle where all the fowls have ample opportunity to "scratch for it," affording just the right amount of exercise. Keeps them busy all the time.

Guaranteed to improve the flock, increase the egg production and save feed. Descriptive pamphlet on request.

MADE OF HEAVY GALVANIZED IRON

	Each
No. 1—8 quarts.....	\$3.00
No. 2—14 quarts.....	3.75
No. 3—20 quarts.....	4.75

Breeders Magic Egg Tester**The Manufacturers Challenge —**

Any person in the world to hatch one egg the Magic Egg Tester registered unhatchable before incubation. No light. No electricity. No expense and lasts a life-time. Demonstrated at Poultry Shows everywhere. Sold by dealers and agents in every country on the globe. This simple, but wonderful instrument, **SHOW THE BEST AND STRONGEST HATCHABLE EGGS BEFORE INCUBATION**; also the probable sex. Selects the eggs which will absorb heat and moisture alike; rejects the infertile ones, and shows correct moisture throughout the hatch.

Don't set another egg until you have a Breeders' Magic Egg Tester. Price, Each, \$2.00

Diamond Poultry Remedies

These are manufactured exclusively by us and we fully guarantee them.

DIAMOND MICROZONE. Will cure Roup, Cholera, Swelled Head, Sore Eyes, and most all Chicken Diseases. Every poultry keeper should have a bottle of this on hand. Liquid, cannot be mailed. Price, per bottle, 50c.

DIAMOND CHOLERA CURE. Comes in powder form. Soluble in water. Full directions on each box. Price, per box, postpaid, 50c.

DIAMOND ROUP CURE. Comes in powder form. Full directions in each box. Price, per box, postpaid, 50c and \$1.00.

Lambert's Lice Remedies

DEATH TO LICE. 5 oz., 10c; 15 oz., 25c; 48 oz., 50c; 100 oz., \$1.00.

DEATH TO LICE—SPECIAL. Dissolve in kerosene. 4 oz., 10c; 16 oz., 25c.

DEATH TO LICE OINTMENT. For lice on chicks, scaly shanks on fowls of any kind. 1 oz., 10c, postpaid; 3 oz., 25c, postpaid.

CONKEY'S ROUP CURE.

One of the best roup and canker cures on the market. Price, per box, postpaid, 50c and \$1.00.

AVENARIUS CARBOLINEUM. For preserving any kind of timber above or below ground. Quart can, 50c; gal., \$1.50; 5 gals., \$7.00.

Miscellaneous Poultry Supplies

"Diamond"

Sanitary Self-Feeding Boxes

Made of heavy galvanized iron; soon pays for itself in preventing waste of feed. For keeping grit, shells and charcoal before the fowls at all times. 3 compartments. Weight 2 $\frac{1}{2}$ lbs.

Price, each, 75c.

Large size, weight 3 lbs.

Price, each, \$1.00.

Mann's Swinging Feed Tray

For water or feed. Fowls cannot scratch dirt into it, nor feed out of it, nor roost on it; yet will not tip over or spill the food out.

Price, 18-Inch, weight 5 $\frac{1}{2}$ lbs., \$1.25; 27-Inch, weight 6 $\frac{1}{2}$ lbs., \$1.50; 36-Inch, weight 8 lbs., \$1.85.

Diamond Galvanized Wall Fountain

(See cut.)

Something new and serviceable. To be hung on the wall or against an upright post, at any height. The patented construction protects the water from becoming soiled. Anyone can easily see the convenience of these.

One gallon size, weight 2 lbs.
Each, 60c.

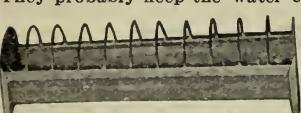
Two gallon size, weight 2 $\frac{1}{2}$ lbs.
Each, 75c.

Stone Fountains

Sanitary Stone Fountain

These are strong and well finished; made in two pieces and easily washed and kept clean. They probably keep the water cooler than the galvanized fountains, but are heavier to handle and more liable to break.

Price, $\frac{1}{2}$ gal, 35c; 1 gal, 50c.



Wire-Covered Feed Trough

Galvanized Iron Drinking Fountains

Our Galvanized Iron Drinking Fountains embody every good feature of the down-to-date drinking fountains, and, we believe, are the best in use. They are easily filled, cleansed and kept clean. If placed in the shade in summer time, the water will keep nearly as cool as in an earthen vessel. They are much lighter than the earthenware fountains and are safer to ship. A dozen can be put in a compact package for shipment, as they nest together. We offer them at a very low price.

Small size, weight $\frac{1}{4}$ lb.

Each, 30c; 6, \$1.70. Medium size, weight 1 lb. **Each, 40c; 6, \$2.25.**

Large size, weight 1 $\frac{1}{2}$ lbs. **Each, 50c; 6, \$2.75.**

Medium size, weight 1 lb. **Each, 40c; 6, \$2.25.**

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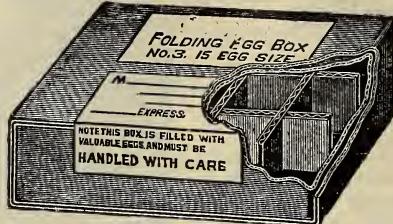
Medium size, weight 1 lb. **Each, 40c; 6, \$2.25.**

Large size, weight 1 $\frac{1}{2}$ lbs. **Each, 50c; 6, \$2.75.**

Medium size, weight 1 lb. **Each, 40c; 6, \$2.25.**

Large size, weight 1 $\frac{1}{2}$ lbs. **Each, 50c; 6, \$2.75.**

Miscellaneous Poultry Supplies Continued



Set Up Ready to Ship.

Anderson Folding Egg Boxes

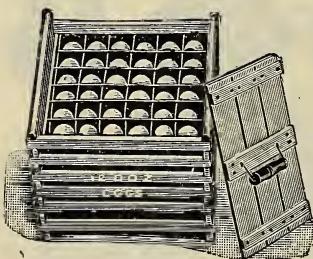
Made of heavy corrugated paper. Only a few seconds' work to set the box up, pack it with eggs, and address it. These boxes are light but very strong, being firmly braced, and will stand the weight of several hundred pounds without crushing.

No.	Size	Weight	Each	Six	Dozen
3	15-Egg	1 lb.	\$0.15	\$0.80	\$1.50
4	30-Egg	1 1/2 lb.	.25	1.25	2.25
5	50-Egg	2 lb.	.40	2.25	3.50

Ideal Paper Egg Boxes

Intended for use in delivering eggs to private families. If you have a "select" egg trade, you should use this box. Nicely printed with a blank space for your name and address. Printed to order in two M. lots at no extra charge. They ship "knocked down" at very low rates. Weight 12 lbs. per 100.

Prices: 1-dozen size, 20c dozen; \$1.00 per 100; \$9.00 per 1000. Sample box by mail, 5c.



The "Humpty Dumpty"

Collapsible Poultry Coop

These are the neatest, lightest and strongest coops for shipping poultry that we have ever seen. They are well made, and will last for years. Easily cleaned and stored. They are up-to-date coops, and make a good impression. They are a mighty good investment for any poultry raiser. Coops are made in three sizes. All treated with oil. Order a sample coop.

No. 1 Coop. For 12 to 24 chickens, size 36x24x12, weight, 23 pounds. Price, \$1.80.

No. 2 Coop. For 24 to 36 chickens, size 48x30x12, weight, 33 pounds. Price, \$1.95.

No. 3 Coop. For turkeys and geese; will carry 250 pounds of weight six 48x30x16.

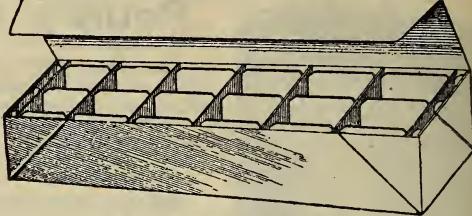
Hydro Safety Lamps.

Oakes—Made especially for incubators and brooders; has a water jacket and is perfectly safe.

No. 1—Small size, $\frac{3}{4}$ -inch wick, weight $\frac{3}{4}$ lb. Each, \$1.00.

No. 2—Medium size, 1-inch wick, weight 1 lb. Each, \$1.50.

No. 3—Large size, $1\frac{1}{2}$ -inch wick, weight 1 $\frac{1}{4}$ lb. Each, \$1.75.



Suwanee Egg Carton

Saves Breakage, Folds Flat

When filled fits into a regular egg case, 3 doz. in a layer.

Every man in the egg trade should use the Suwanee Egg Carton.

A light but strong carton, holding one dozen eggs, and built to fit a regular egg-packer. Throw away your "fillers." Use this carton, packs three to a layer in an ordinary egg case, and is always ready for delivery. **Saves handling—saves breakage.** Built with double walls. Ask for sample. Weight with fillers, 3 ozs. each. **Price, per doz., 25c; per 100, \$1.25; per 1000, \$10.00.**

ADVERTISE YOUR EGGS. In lots of 10,000 cartons we will print your name or any announcement you want to make, at the rate of 50c per thousand.

P. S. Co.'s Shipping Coops

All wood, neat, very light, but strong. Poultry raisers selling poultry at fancy prices should always use these coops. Weight Nailed K. D.

No. 1. 10x21x18 10 $\frac{1}{2}$ lbs. Each, 30c; 6, \$1.60.

No. 2. 10x24x20 11 $\frac{1}{2}$ lbs. Each, 40c; 6, 2.20.

No. 3. 20x24x20 18 $\frac{1}{2}$ lbs. Each, 50c; 6, 2.75.

"Humpty Dumpty"

The best, the cheapest, the most convenient EGG CARRIER. The "Humpty Dumpty" is light but strong, being almost indestructible. Can be folded flat for shipping empty. The most satisfactory egg carrier. Holds 12 dozen. Weight with fillers 7 lbs.

Price: Each, 75c; per 6, \$3.75; doz., \$7.00.

Egg Cases

30-dozen case with pasteboard fillers.....	\$0.40
Pasteboard fillers for 30-dozen case. Weight 3 lbs.....	.20
Pasteboard fillers, per case (for 12 30-dozen cases).....	1.80



COOP COLLAPSED



COOP SET UP

Caponizing Instruments.

The demand for capons exceeds the supply, the price per pound averaging more than twice as much as that paid for ordinary roosters.

P. S. Co.'s Standard, the best low priced set. **Price, postpaid, \$2.00.**

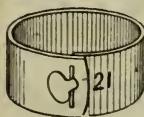
Wigmore, a first-class outfit with book of instructions. **Price, postpaid, \$2.50.**

 Full details of the many superior advantages of the Lee Incubators and Brooders are given in the Lee Booklet, sent free on request.

Miscellaneous Poultry Supplies

Leg Bands For Poultry and Pigeons (See Cuts)

Every chicken must have a leg band on before it can be entered in a poultry show. In ordering Leg Bands be sure to state sizes wanted, or breed of fowls bands are to be used on, and number wanted for males or females.



ECLIPSE



DOUBLE CLINCH



SMITH SEALED



LEADER BAND

DOUBLE CLINCH—A new band, very safe; no exposed corners, ends or loops; has double fasteners.

Prices, postpaid, 12 for 15c; 25 for 30c; 50 for 50c; 100 for 75c.

SMITH SEALED—Of aluminum and so constructed that by simply crushing a soft rivet they are sealed on the bird's leg, and must be destroyed to be removed. See cut.

Prices, postpaid, 12 for 25c; 25 for 50c; 60 for \$1.00; 100 for \$1.25.

PIGEON BANDS—We can supply the **Double Clinch** or **Sealed Band** at above regular prices, or the **Open Band**—you simply clasp it on—at the price of **Eclipse**.

Smith Sealing Tool.

Made especially for sealing the Smith leg bands. Plain Jaw, 50c; lettered Jaw, any letter, 75c. postage, 10c.

Petty's Poultry Punch.

Latest, most convenient Poultry Punch; can be put on a key ring or used for a watch charm. Will not clog. Thoroughly practical.

Price, postpaid, 25c.

Insect Powder Gun.

There is no need to waste any powder if you use this small hand powder blower. Detachable bottom for filling. For use in applying insect powder of any kind on poultry, dogs or cats.

Price, each, small, 15c; large, 30c, postpaid.

THERMOMETERS

For Incubators—Tested.

FIG. 8—Cornell Style.....	\$1.00
Fig 6—P. S. Co.'s triangle shape; metal back.....	.75
Fig 10 P. S. Co.'s—Straight Metal back....	.60
Fig. 14—Triangle shape; best incubator thermometer made. Certified correct; worth the additional cost.....	1.50
Mandy Lee style.....	.80

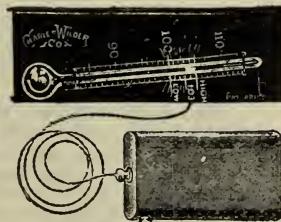
Fig. 1—P. S. Co.'s Self-Registering—a necessity for Greenhouse and Poultrymen. Will accurately register the extremes of heat and cold.

Fig. 3—Hotbed Thermometer, for plunging in the bed to know when the temperature is right for planting. This knowledge may save much loss and delay.



MANDY LEE EGG TESTER.

This Egg Tester is made to use on a lamp and will fit the ordinary No. 2 burner. The same tester is furnished with all Lee Incubators. **Price, 50c, postpaid.**



The Wilder Illuminated Thermometer

Instantly indicates the temperature without opening doors. So simple that a child can attach it to incubator.

Everyone who owns an incubator knows how hard it is to read the thermometer correctly through the glass doors, and it is not always advisable to open them. But with the "Wilder" you simply press the button and the temperature is plainly indicated. Where several incubators are running, wires can be so placed that a single battery is carried and plug inserted for readings. Batteries and parts can be replaced at small cost if broken or exhausted. Wilder thermometers are absolutely dependable and are fully guaranteed.

Price, each, \$2.75.

ECLIPSE—Flat aluminum bands, no sharp corners or edges; easiest flat band to put on.

Prices, postpaid, 12 for 20c; 25 for 35c; 50 for 60c; 100 for 85c.

LEADER—Latest and best adjustable leg band out. Has neat, compact, and smooth fastening, with no catching points; easily attached and is absolutely secure.

Prices, postpaid, 12 for 20c; 25 for 35c; 50 for 60c; 100 for \$1.00.



Reliable Poultry Marker.

For marking the web between the toes. One of the best and handiest markers.

Postpaid, 35c.

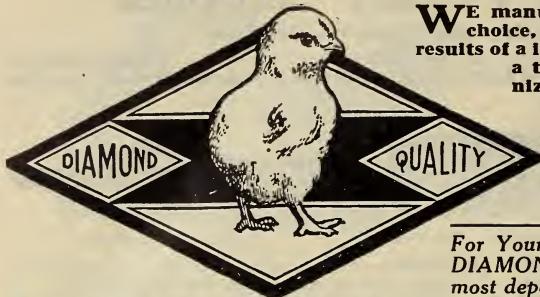
Poultry Killing Knife.

French, best and most popular.

Price, postpaid, 50c.



Portland Seed Co.'s "Diamond Quality" Poultry Foods



WE manufacture our Diamond Poultry Foods from choice, clean, wholesome material, and they are the results of a lifetime of careful study and experiments by a thoroughly practical expert, who is a recognized authority on feeding.

Diamond Chick Food

A Properly Balanced Ration that will make chicks grow and keep them healthy

For Young Turkeys, Pheasants and all young fowls
DIAMOND CHICK FOOD is unexcelled. The safest
most dependable and satisfactory food.

Our trade mark on every original package is your protection. Demand it of your dealer, as there are many dangerous substitutes.

The Making of Diamond Chick Food

The select grains that are used in the preparation of Diamond Chick Food are cut by a special process screened to a uniform size and run through a Fanning Mill to remove the dust and meal, which is the fatal element in most Chick Foods. After this process the ingredients are carefully weighed and mixed in correct proportions. No guess work.

By using Diamond Chick Food you are giving the chicks just what Nature Intended they should have, a food composed of grains (cracked), small seeds, bone, dried sweet meat (to take the place of insects and bugs), charcoal, etc., mixed in the right proportions to produce a quick and profitable growth without l.o.s. Its so convenient, so handy, always ready for use, and you can raise so many more chicks by feeding it that it is the **cheapest food you can buy**. A trial is all we ask.

Ask for descriptive pamphlet or Directions for feeding in each sack or package.

Price: 5 lbs., 25c; 12 lbs., 50c; 25 lbs., 90c; 50 lbs., \$1.60; 100 lbs. \$3.00

Portland Seed Co.'s Diamond Egg Food

Makes hens lay when eggs are high; keeps poultry healthy. Unequaled for feeding young stock.

THE MOST SUCCESSFUL COMBINATION OF EGG PRODUCING ELEMENTS ever prepared, being a complete ground food for growing fowls and hens, encouraging rapid growth and increasing egg production. Can be fed dry or as a mash. Diamond Egg Food costs no more than other foods, and is of twice the feeding value.

Price: per lb., 3c; 100-lb. sk., \$2.00.

Diamond Scratch Food

The most successful "up-to-now" ready-mixed complete food. Makes hens sing, and singing hens lay. A perfect working ration" for fowls. Grains, Beef, Bone and Charcoal carefully prepared in the correct proportion; a veritable "hen's" delight, and a great egg-producer.

Price, per lb., 3c; per 100 lbs., \$2.00.

HIGH GRADE BEEF SCRAPS.

Diamond Brand, Special. A new beef product, perfectly prepared, fine ground and clean The highest feeding value yet produced.

Price: 4 lbs., 25c; 50 lbs., \$2.25; 100 lbs., \$4.00.

Steel Cut, granulated, clean and free from dust, hide, hair, etc. There is no waste; can be fed like grain if preferred. Every poultry keeper knows the value of this food.

Price: 5 lbs., 25c; 50 lbs., \$2.25; 100 lbs., \$3.75.

HIGH GRADE MEAT MEAL.

A highly concentrated food. Being cooked meat, dried and ground. Very rich in protein. It should be mixed with the soft food. No hides or tankage in our meat meal, but, as its name implies, meat, cooked, dried and ground; unexcelled for egg-production.

DIAMOND GRADE.

1 lb., 10c; 10 lbs., 50c; 100 lbs., \$4.00.

STANDARD. Good Grade.....100 lbs., \$2.50.

GRIT.

Every poultry raiser should keep a supply of this grit in each pen. Made in two sizes, chick and hen size. We always send hen size unless otherwise ordered.

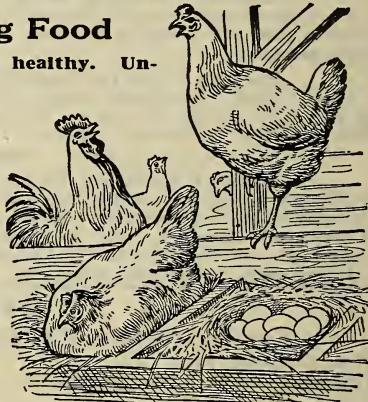
DIAMOND CRYSTAL.

Price: 5 lbs., 10c; 100 lbs., \$1.25.

CHARCOAL.

Our Charcoal is guaranteed, prepared especially for poultry; no dust; a good thing for bowel trouble, sour crop and indigestion; a health preserver.

Prices: 1 lb., 10c; 10 lbs., 50c; 100 lbs. \$3.50



GRANULATED BONE

Our "Diamond Brand" is made from selected hard, white, raw bones, and of a superior quality; an indispensable food for laying hens.

Diamond.

Price: 10 lbs., 35c; 100 lbs., \$2.75.

Standard.

Price: 100 lbs., \$2.25.

BLOOD MEAL.

The most highly concentrated egg-producer on the market. To be fed in soft food. Unexcelled as a food for forcing growth of chicks or as an egg food.

DIAMOND—Price, 1 lb., 10c; 10 lbs., 50c.; 50 lbs., \$2.75; 100 lbs., \$5.00.

STANDARD—Price, 100 lbs., \$3.00

OYSTER SHELLS, CRUSHED.

We offer nice clean stock, free from dust and waste. These should be within reach of your hens at all times. In two sizes, coarse and fine.

DIAMOND BRAND.

Price, 5 lbs., 10c; 100 lbs., \$1.35.

WESTERN.

Price, 5 lbs., 10c; 100 lbs., \$1.25.

STANDARD Poultry Shell—A very good grade of mixed sea shell—sold by some dealers as oyster shell—but is not so good and has more waste.

Our price is the lowest..... 75c per 100 lbs.

Portland Seed Co.'s Diamond Poultry Foods—Con'd

BIRD SEED.

Not for Planting. Special Prices in Quantity.
P. S. Co.'s Best Mixed... Per lb., postpaid, 20c.
Canary—Best Re-cleaned. Per lb., postpaid, 20c.
Hemp Per lb., postpaid, 20c.
Millet Per lb., postpaid, 20c.
Rape Per lb., postpaid, 20c.
Cuttle Bone Large bone. Postpaid, 2 for 5c.

TOBACCO DUST.

For use in baths and nests. A cheap and effective exterminator of lice.

Price, 1 lb., 10c; postpaid, 25c; 100 lbs., \$5.75.

ALFALFA MEAL.

The best substitute for green food for Winter feeding; helps keep the egg basket full; mixed with the soft feed is good for large or small chicks; endorsed by leading experts.

Price, 1 lb., 5c; 10 lbs., 30c; 100 lbs., \$1.50.

POULTRY PEPPER.

A good tonic and invigorator; ground.

Price, 1 lb., 25c; 5 lbs., \$1.00.

International Stock and Poultry Foods, Remedies, Etc.

Every package of "INTERNATIONAL" is guaranteed to fulfill every claim made for it, or your money back for the asking. We sell "INTERNATIONAL" on its merits. You are the judge. Full directions on each package.

REMEMBER, NOT POSTPAID AT FOLLOWING PRICES, UNLESS SO STATED.

For Poultry

INTERNATIONAL POULTRY FOOD.

Pkgs., 25c, wt. 2 lbs.; 50c, wt., 3 1/2 lbs.; and \$1.00, wt. 7 lbs.; 25-lb. pail, \$3.50.

INTERNATIONAL LOUSE KILLER.

Weight 1 1/2 lbs.

Pkg., 25c.

INTERNATIONAL LICE PAINT.

35c and 60c cans.

INTERNATIONAL SCALEY LEG OINTMENT

Box 25c, postpaid.

INTERNATIONAL CRESUL. 1/2-pint can, 25c.

INTERNATIONAL ASEPTIN.

Per box, 25c, postpaid

INTERNATIONAL ROUP CURE.

Per box, 50c, postpaid

INTERNATIONAL RHEUMATISM OIL.

Per bottle, 25c.

INTERNATIONAL SUDAL. Box, 25c, postpd.

INTERNATIONAL CHOLERA CURE.

Per bottle, 25c.

INTERNATIONAL WORM PILLS 50c, postpd.

INTERNATIONAL BOWEL TROUBLE REMEDY.

Per box, 50c, postpaid.

BLATCH-FORD'S CALF MEAL

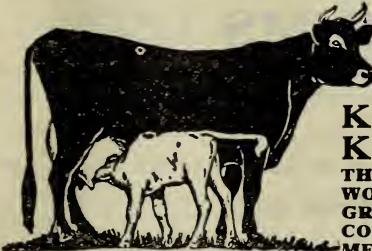
The perfect Milk Substitute at 1/2 the cost. One lb. makes one gallon. Calves, pigs, colts, lambs, thrive on it.

25 lbs. \$1.25. 50 lbs. \$2.25. 100 lbs. \$4.00.

SO-BOS-SO

We have tried them all, and offer So-Bos-So as the best Fly Killer.

Cows give one-third more milk and horses do better and on less feed, when protected from flies by So-Bos-So. It requires only a few seconds to apply it and costs less than 1/4c a day per head. You cannot afford to be without it. Apply with cloth, sponge, or hand-sprayers listed on page 101. Put up in 1-gallon sealed cans only. Price \$1.25

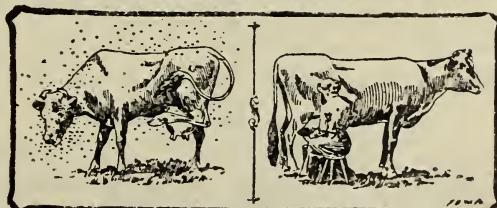


KOW KURE THE WORLD'S GREATEST COW MEDICINE.

KOW KURE is the only cow medicine that is strictly for cows only. It is not a stock food, but a specific remedy, especially for cow diseases, such as Barrenness, Scours, Milk Fever, Caked Udder, Bloating, Red Water, Swelling of the Bag, etc. It prevents abortion and removes retained after birth. It tones up the system, renews vitality, restores appetite to cows that are "off feed," and keeps them healthy. Makes poor cows good, good cows better, and makes more money for cow owners. It increases the milk flow, and enables the cows to produce strong, vigorous calves. It's the dairymen's gold mine, and a sure profit-payer. **KOW-KURE.** 50c can. 1 1/4 lbs. \$1.00 can. 3 1/2 lbs.

"MORE MONEY FROM YOUR COWS"

A Handbook for Cow Owners, describing the diseases that affect a cow's productivity and telling how to prevent and cure them in a single cow or a whole herd. FREE on request.



BEFORE

AFTER

BAG BALM. A soothing, penetrating ointment for all afflictions of the bag.

50c packages, postpaid, 65c.

GRANGE GARGET CURE. An unsurpassed and positive cure. 50c cans; Weight 2 lbs.

HORSE COMFORT. For wire cuts and all flesh wounds. 25c and 50c bottles.

AMERICAN HORSE TONIC. A general improver for horses. 25c boxes; postpaid, 35c.

REMEDIES, LICE KILLERS, ETC.**Lee's Foods and Remedies for Stock and Poultry**

IF YOU have never used the Lee goods or remedies, get in line. You can not afford to be without them. Get in touch with the Lee Company. Their valuable booklets are free to poultry-keepers, and contain the most reliable and complete information to date on all poultry problems. We mail them on request.

Lee's Lice Killer

LIQUID. Destroys either by vapor or contact. No trouble to apply; just paint the roosts or wall at night. Rids poultry and houses of all vermin; is prepared exclusively for this purpose, and there is nothing just as good. Price, Quart, 35c; $\frac{1}{2}$ -gal., 60c; gal., \$1.00; 5 gals., \$4.00

Lee's Germozone—For Poultry

The cure that cures. Its action is marvelous. Never fails to cure Bowel Complaint, Chol-era, Roup, Colds, etc. Whatever malady threatens, Germozone will cure or prevent.

PRICES

Lee's Germozone. Liquid. 12-oz. bottle.....50c

Lee's Germozone. Tablets. Pkg., postpaid.....50c

 If you have never used Germozone, get a package at once. It will prove the most, profitable investment you have ever made and you will never again be without it.

LEE'S BEST CONDITIONER STOCK FOOD.

Promotes good health, digestion and assimilation.

Put up in 25c and 75c pkgs.; 25-lb. pails, \$2.50

LEE'S EGG MAKER is not a tonic nor a medicine, but a meat food of great value. It will make hens lay, chicks grow, and keep them all in a healthy, vigorous condition.

2½-lb. pkg., 25c; 5½-lb. pkg., 50c; 25-lb. pail, \$2.00; 100-lb. sack, \$7.00.

LEE'S HOG REMEDY cures all diseases of hogs and keeps them healthy.

Pkg., 75c; 25-lb. pail, \$2.00.

LEE'S WORM POWDER for horses, cattle, sheep and hogs. Safe and sure in result.

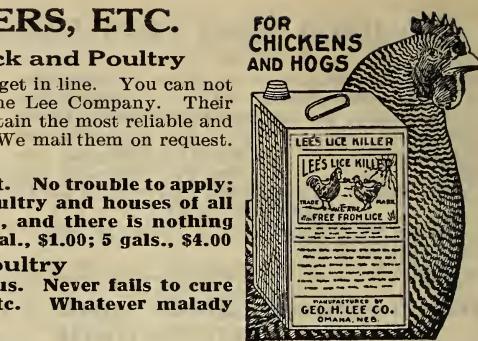
Pkg. 25c, weight, 1 $\frac{1}{4}$ lbs.

LEE'S MIXED STOCK SALT. Every breeder should have a supply of this salt.

25-lb. sack, \$1.25; 100 lbs., \$4.00.

LEE'S WHITE DIARRHOEA REMEDY. The best medicine for this dangerous disease of little chicks.

12-oz. bottle, 50c.



LEE'S CARBOLIC SHEEP DIP. For lice ticks, mange, itch or scab, on cattle, sheep and hogs.

Qt., 50c; $\frac{1}{2}$ -gal., 75c; gal. \$1.25; 5 gals., \$4.50.

LEE'S HEADLICE OINTMENT. For little chicks Large box, 15c.

LEE'S INSECT DESTROYER. (Powder) $\frac{1}{4}$ lb. can, 25c; 3 lb. can, 50c.

LEE'S PEERLESS GOPHER KILLER. For killing gophers, squirrels, etc. Sure death. Quart can, 75c.

LEE'S PEERLESS BUG KILLER. 12-oz. bottle, 25c.

LEE'S HICKORY SMOKE EXTRACT. Hickory Smoke Extract applied to meat preserves it indefinitely, imparting the delicious flavor that is only otherwise obtained by smoking with green hickory.

12-oz. bottle, 35c; 32-oz. bottle, 75c.

LEE'S FLY-CURO. We sell thousands of cans of this fly spray every season, and it gives good satisfaction. Qt., 35c; $\frac{1}{2}$ -gal., 60c; gal., \$1.

Our FREE PREMIUMS

Your Own Selections

Aside from furnishing you with the best seeds that grow and the best stocks obtainable, we have made a practice during the past few years of offering free premiums with certain sized orders. We believe these have been fully appreciated by our customers.

If you wish to take advantage of these premium offers, be sure to make your selections when sending in your orders; otherwise they cannot be sent.

THESE PREMIUMS ARE GIVEN ONLY WHEN CASH ACCOMPANIES ORDER AND AT PRICES PRINTED IN THIS CATALOG.

With a \$2.50 order Your choice of Vegetable or Flower Seeds in packets or ounces to the value of 25c, or any 25c Lily, Dahlia, Canna or Gladioli Bulb.

With a \$10 order You may double the premiums on the \$5.00 order or choose any 50c book in our list.

If your order is not large enough to get the premium wanted, get your neighbor to send with you—the premiums are worth the trouble.

Note.—The amount allowed on premiums cannot be deducted from the price, but is allowed over the amount of the order.

IF YOU SELECT PREMIUMS LISTED ABOVE YOU ARE NOT ENTITLED TO OUR SPECIAL DISCOUNT OFFER BELOW ON SEEDS IN PACKETS AND OUNCES.

Special Rates on Seeds in Packets or Ounces—Postpaid

25 cents of Seeds Worth **FREE**

with every \$1.00 order for Seeds in Packets and ounces. Remember, in packets and ounces only. \$1.25 for \$1.00, \$2.50 for \$2.00, and so on. This does not apply on quantities over one ounce, or where any other premium is taken.

We pay one cent (in seeds) per name for good addresses. See back of Order Sheet.

 **NO PREMIUMS** on GRASSES, GRAINS or FOODS, which are subject to market changes.

GENERAL INDEX

	Page		Page		Page
Artichoke Tubers	41	Flowering Plants, Bulbs	65-81	Potato Planters	Page
Barley	42	Formaldehyde	37	Poultry Foods	126-128
Barrel Carts	99	Fruit Trees and Bushes	91	Poultry Supplies	116-128
Bee Supplies	111-115	Garden Seeds	2-33	Pruning Tools	105-106
Berry Bushes	91	Garden Tools	105-110	Pumps and Sprayers	97-102
Bird Seed	127	Glazing Points	104	Raffia and Reeds	47
Bone Cutters	120-121	Gladoli	74-75	Roses	82-89
Books	46-47	Gopher Gums	107	Seed Drills	108-109
Brooders	118-119	Grass Hooks	105	Seed Sowers	95
Chick Feed	126	Grass Seeds	38-39-40	Sharples Separators	103
Climbing Vines	90	Hanging Baskets	89	Shears	105-106
Clover Cutters	121	Herbs	33	Sheep Dip	127-128
Clover and Grass Seeds	38-39-40	Hose	104	So-Bos-So	127
Coops, Collapsible	124	Incubators and Brooders	116-119	"Spelt" see Emmer	41
Corn Planters	95	Insecticides	96	Sprays and Insecticides	96
Cultivators	108-109-110	Kale	42 and 17	Sprinklers	101
Dahlias	76-79	Knives	105	Stock Foods and Remedies	27-28
Dairy Supplies	102-103	Kow-Kure	127	Strawberry Plants	92-93
Drinking Fountains	123	Labels and Plant Stakes	105	Sweet Peas	60-63
Egg Foods	126-128	Lice Killers	127-128	Thermometers	125
Egg Boxes	124	Mastica, Mastica Machines	104	Tobacco	31
Fanning Mills	95	Mushroom Spawn	19	Traps	107
Farm and Field Seeds	41-42-43	Nozzles and Fittings	102	Trap Nests	122
Farm Tools, etc	94-95	Oats	36-37	Tree Seeds	31
Farmogerm	45	Onion Sets	23	Trowels	107
Ferns	71	Palms and Pot Plants	70	Vegetable Plants and Roots	94
Feeders	122-123	Pansy Plants	65	Vegetable Seed Dept	2-33
Fertilizers	44-45	Pasture Mixtures	40	Vetches or Tares	43
Fertilizer Drill	45	Planet Jr. Implements 108-109-110	Water Lilies	75	
Florist's and Nursery Supplies	105-106-107	Plant Food	45	Weed Killer	101
Flower Pots	89	Plant Setters	94	Weeders	106
Flower Seeds	48-64	Potash	45	Wheat	43
		Potatoes	34-35	Wire Netting	121

 See *Parcel Post Rates* inside front cover

PRICES on POTASH NITRATE of SODA etc. These cancel all other prices in this book

The following prices are based on latest market quotations and while the present tendency is upward these will not be advanced until stock is exhausted.

MURIATE OF POTASH Price per lb., 5c; 100 lbs., \$3.15; sack, 224 lbs., \$6.50; ton, \$54.00.

SULPHATE OF POTASH Price per lb., 5c; 100 lbs., \$3.50; sack, 224 lbs., \$7.35; ton, \$62.00.

KAINIT Price per lb., 3c; sack, 224 lbs., \$2.50; ton, \$22.00.

NITRATE OF SODA Price per lb., 5c; 100 lbs., \$3.25; ton, \$60.00.

FISH GUANA 100 lbs., \$2.50; ton, \$45.00. **SUPERPHOSPHATE**, 100 lbs., \$1.50; ton, \$27.00.

REFERENCE TABLES

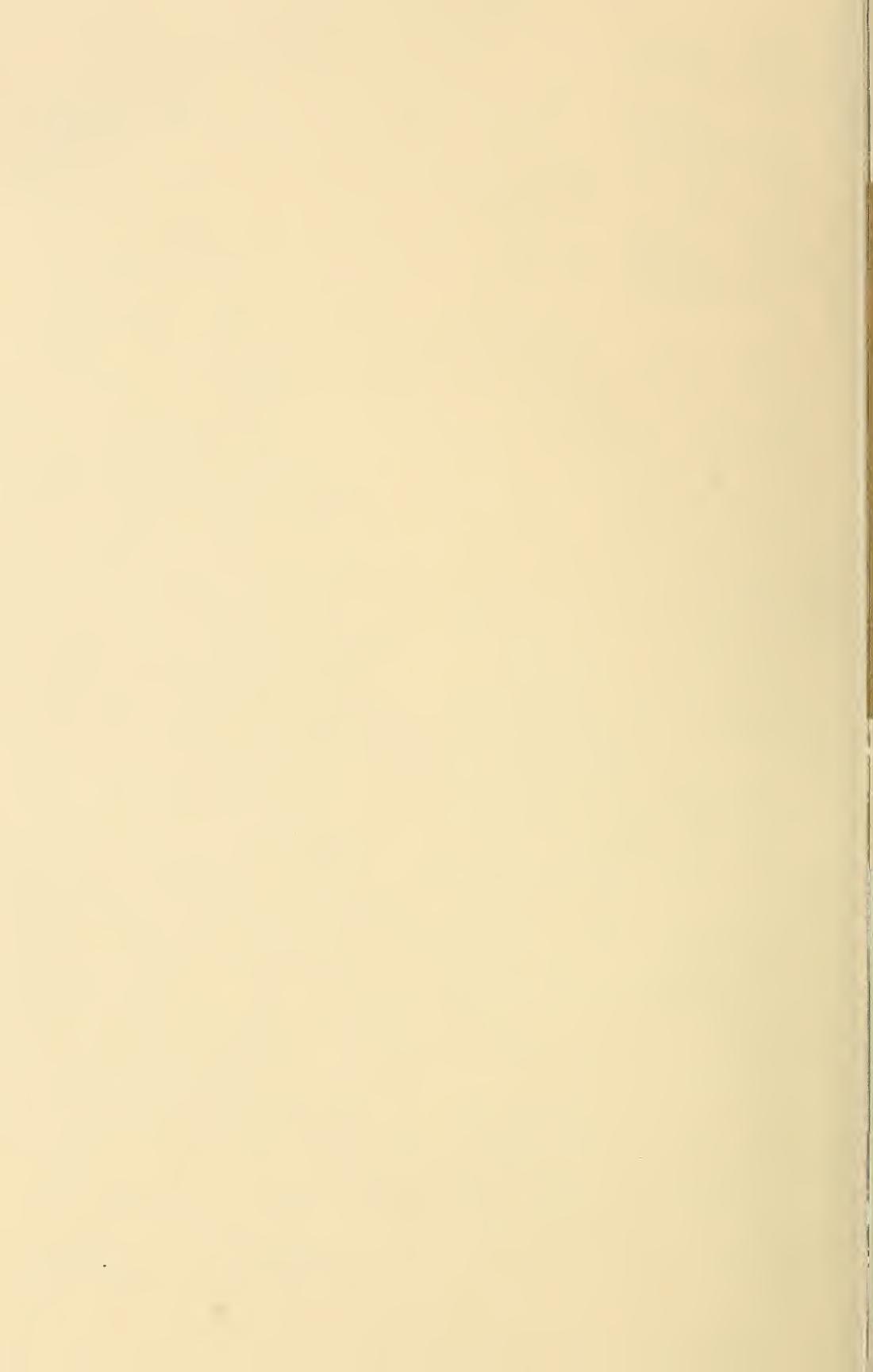
Quantity of Seed to produce a given number of plants and sow an acre.

	Quantity per acre.		Quantity per acre.		Quantity per acre.	
Artichoke, 1 oz. to 500 plants. 6 oz.	Red Top, solid seed	10 to 15 lbs.	Kale, 1 oz. to 2,000 plants	4 oz.	Vetches	1½ to 2 bu.
Asparagus, 1 oz. to 800 plants. 1 lb.	Asparagus Roots	7500	Kaffir Corn, in drills	6 to 10 lbs.	With grain	1 bu.
Barley	Barley	2 to 2 ½ bu	Kohl Rabi, 1 oz. to 2,000 plants. 4 oz.	4 oz.	Wheat	1½ to 2 bu.
Beans, dwarf, 1 lb. to 100 ft. of drill	Beans, dwarf	1 bu.	Horseradish Roots, 15,000 to 25,000.	15,000 to 25,000.		
Pole, 1 lb. to 100 hills. ½ bu.	Pole, 1 lb. to 100 hills. ½ bu.	6 to 7 lbs.	Kale, 1 oz. to 2,000 plants	4 oz.		
Beet, Garden, 1 oz. to 100 ft. of drill	Beet, Garden, 1 oz. to 100 ft. of drill	6 to 7 lbs.	Kaffir Corn, in drills	6 to 10 lbs.		
Mangel, 1 oz. to 100 ft. of drill	Mangel, 1 oz. to 100 ft. of drill	5 lbs.	Kohl Rabi, 1 oz. to 2,000 plants. 4 oz.	4 oz.		
Broccoli, 1 oz. to 2,000 plants. 4 oz.	Broccoli, 1 oz. to 2,000 plants. 4 oz.	3 to 4 oz.	Leek, 1 oz. to 100 ft. of drill	4 lbs.		
Brussels Sprouts, 1 oz. to 2,000 plants	Brussels Sprouts, 1 oz. to 2,000 plants	3 to 4 oz.	Lettuce, 1 oz. to 150 ft. drill	3 lbs.		
Cabbage, 1 oz. to 2,000 plants. 4 oz.	Cabbage, 1 oz. to 2,000 plants. 4 oz.	3 lbs.	Millet—For Seed	20 lbs.		
Carrot, ½ oz. to 100 ft. drill	Carrot, ½ oz. to 100 ft. drill	3 lbs.	For Hay	30 lbs.		
Cauliflower, 1 oz. to 3,000 plants	Cauliflower, 1 oz. to 3,000 plants	3 to 4 oz.	Melon, Musk, 2 oz. to 100 hills	2 to 3 lbs.		
Celery, 1 oz to 5,000 plants	Celery, 1 oz to 5,000 plants	4 oz.	Water, 4 oz. to 100 hills	3 to 4 lbs.		
Cheat	Cheat	2 bu.	Oats	2 to 3 bu.		
Chicory	Chicory	4 lbs.	Okra, 1 oz. to 100 ft. of drill	8 lbs.		
Clover, Alsike and White. 8 to 10 lbs. Alfalfa	Clover, Alsike and White. 8 to 10 lbs. Alfalfa	15 to 20 lbs.	Onion Seed, for sets	60 to 85 lbs.		
Crimson Trefoil	Crimson Trefoil	10 to 15 lbs.	1 oz. to 150 ft. drill	3 to 4 lbs.		
Red	Red	10 to 15 lbs.	Onion Sets, 1 qt. to 40 ft. drill	8 bu.		
Collards, 1 oz. to 2,000 plants. 4 oz.	Collards, 1 oz. to 2,000 plants. 4 oz.	8 to 10 lbs.	Parsnips, 1 oz. to 150 ft. drill	3 lbs.		
Corn, Pop (shelled)	Corn, Pop (shelled)	8 to 10 lbs.	Parsley, 1 oz. to 150 ft. drill	3 lbs.		
Sweet or Field, hills	Sweet or Field, hills	12 to 15 lbs.	Peas, Field	2 bu.		
For soiling drills	For soiling drills	3 bu.	Garden, 1 lb. to 100 ft. drill	1 to 2 bu.		
Cress, ¾ oz. to 100 ft. drill	Cress, ¾ oz. to 100 ft. drill	1 lb.	Pepper, 1 oz. to 1,000 plants	2 lbs.		
Cucumber, 1 oz. to 100 hills. 2 to 3 lbs.	Cucumber, 1 oz. to 100 hills. 2 to 3 lbs.	2 to 3 lbs.	Pumpkin, ½ lb. to 100 hills	3 to 5 lbs.		
Egg Plant, 1 oz. to 2,000 plants. 4 oz.	Egg Plant, 1 oz. to 2,000 plants. 4 oz.	2 to 3 lbs.	Radish, 1 oz. to 100 ft. drill	10 lbs.		
Emmer	Emmer	100 lbs.	Rape	3 to 5 lbs.		
Endive, ¼ oz. to 100 ft. drill	Endive, ¼ oz. to 100 ft. drill	4 lbs.	Rye	1½ to 2 bu.		
Flax, broadcast	Flax, broadcast	¾ bu.	Salsify, 1 oz. to 100 ft. drill	6 to 8 lbs.		
Grass—Kentucky Blue, for pasture	Grass—Kentucky Blue, for pasture	1 to 2 bu.	Spinach, 1 oz. to 100 ft. drill	8 to 10 lbs.		
Kentucky Blue for lawns	Kentucky Blue for lawns	100 lbs.	Sugar Cane, in drills	10 lbs.		
Meadow Fescue	Meadow Fescue	1 bu.	Sunflower	8 lbs.		
Mixed Lawn	Mixed Lawn	5 to 6 lbs.	Squash—Summer, 4 oz. to 100 hills	3 lbs.		
Red Top, Chaff	Red Top, Chaff	1 to 2 bu.	Winter, 8 oz. to 100 hills	4 lbs.		

Weights of Various Articles

Per bushel

Barley	48 lbs.
Beans	60 lbs.
Buckwheat	48 lbs.
Blue Grass Kentucky	14 lbs.
English	24 lbs.
Canary Seed	60 lbs.
Cheat	34 lbs.
Clover Seed	60 lbs.
Corn, Shelled	56 lbs.
Charcoal	22 lbs.
Emmer	40 lbs.
Flax Seed	56 lbs.
Grass Seeds (unless otherwise stated)	14 lbs.
Hemp Seed	44 lbs.
Hungarian Millet	48 lbs.
Lawn Grass	20 lbs.
Meadow Fescue	24 lbs.
Millet	50 lbs.
Oats	32 lbs.
Onion Sets	32 lbs.
Orchard Grass	14 lbs.
Peach Pits	48 lbs.
Peas, Smooth	60 lbs.
Peas, Wrinkled	56 lbs.
Perennial Rye	20 lbs.
Potatoes	60 lbs.
Rape	60 lbs.
Rye	56 lbs.
Red Top	14 lbs.
Red Top, Solid Seed	42 lbs.
Timothy	45 lbs.
Vetches	70 lbs.
Wheat	60 lbs.



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PORLAND SEED CO.

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OREGON.



**POULTRY AND BEE
SUPPLIES**

Trees
Plants
Roses

Tools
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Pumps

**MANUFACTURERS
OF
FERTILIZERS**

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ORDER SHEET**Portland Seed Company,****Portland, Oregon****WRITE YOUR ADDRESS PLAINLY** IN THE BLANKS BELOW; also keep your order separate from other matters you may wish to write about. This enables us to FILL ORDERS RAPIDLY and correctly, and answers to your inquiries will not be delayed or overlooked.

Please read "How To Order" (Page 1) Before ordering, and save all misunderstanding.

DON'T FORGET TO SIGN YOUR NAME

Do not write in this space

Name _____

Do not write in this space

Post Office _____ Rural Route No. _____

Station. _____

County. _____ State. _____

Date. _____ Amount Enclosed, \$ _____

Forward by _____

State if wanted by Mail, Express or Steamer

In Ordering Peas, Beans and Corn by the Pound to be Sent by Mail, Add 10 Cents Per Pound for Postage

Quantity

Name of Articles Wanted

Price

Amount Carried Forward,**NOTE.—State what premium you want, otherwise none will be sent.—NOTE.**

If you will fill in the spaces below with the names and addresses of ten of your neighbors who buy Seeds, Plants, Bee or Poultry Supplies, Fertilizers, Sprays or Spray Pumps, you may, with your first order of 25 cents or over, select free of charge any two 5 cent papers of seeds that we list. We rely upon your honesty to send us good reliable names. Please put X in the left hand column under the name of the catalog you think will interest them most.

NOTE.—State what premium you want, otherwise none will be sent.—NOTE

"Diamond
Quality"

FARM AND FIELD SEEDS

TESTED FOR PURITY
AND GERMINATION

BEARDLESS BARLEY

CRIMSON CLOVER
FOR COVER CROPS
PAGE 38

ODERBRUCHER
GERMAN
BARLEY
PAGE 42

THE FINEST
RED CLOVER
SEED
IS GROWN
IN OREGON

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SEED
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